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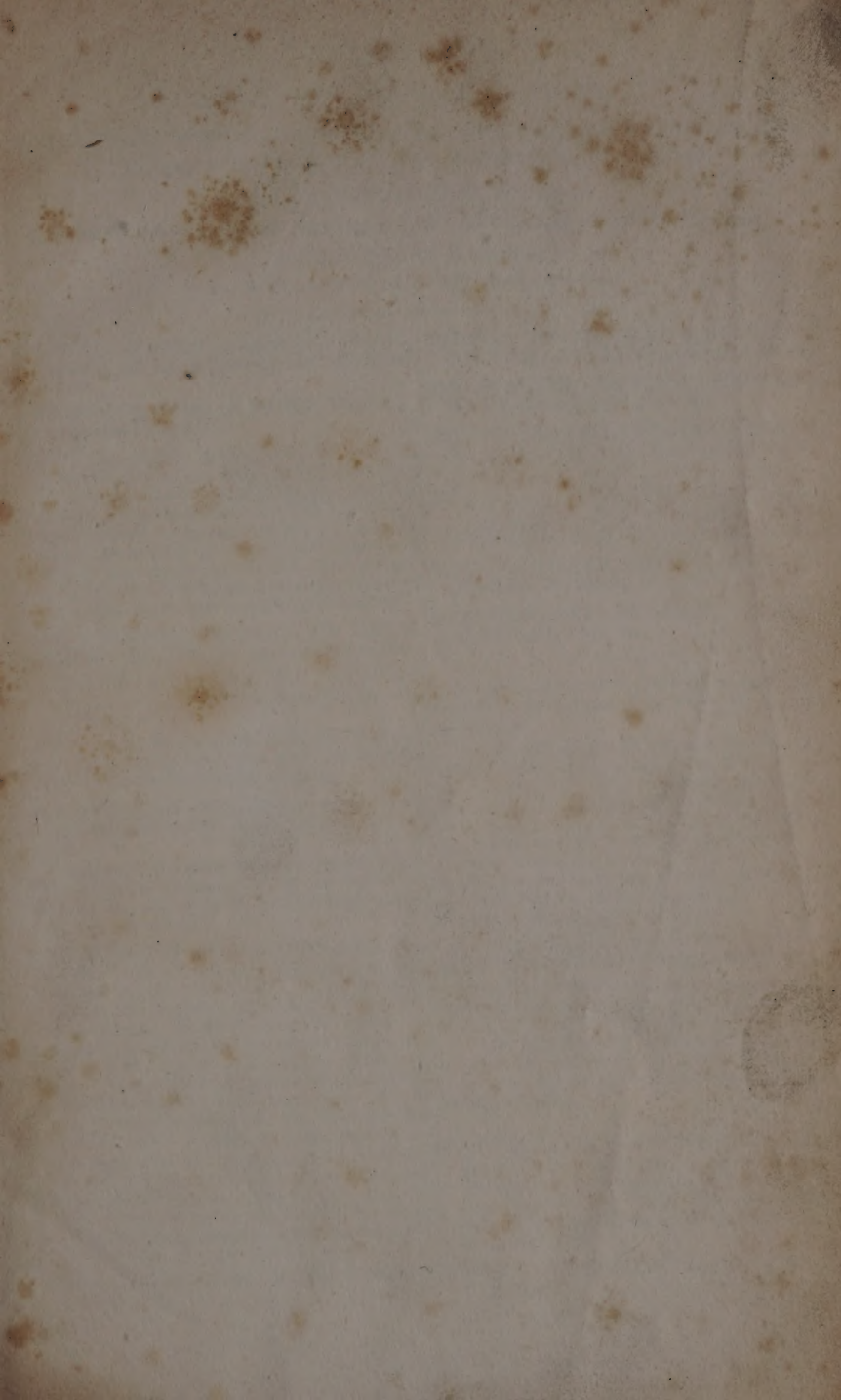
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## ERRATA.

Page 31, line 27, for fixed to, read	to fixed.
77, 6, these,	those.
83, 3, <i>n-g,</i>	<i>ng.</i>
179, 11, an-ces-tors.	an-ces-tors?
342, 37, their vocal,	the vocal.



# PREFACE

## TO THE SECOND EDITION.

---

MORE than six years ago I offered the manuscript of the following work to the then principal bookseller of this city. Engagements which promised to be more lucrative obliged him to decline the publication. The result has shown, that with his instrumentalities of trade he might have made a profitable sale of it; especially as, with my motives in authorship, I would have freely given the whole right of the edition to him. I made no second offer of the manuscript to any other; for as it had been rejected by the foremost publishing patron of American works, I deprecated the influence of his example against me. Thus the first step of my authorship was unfortunate; and as in these days of anxious benevolence, a very few misfortunes are sure to bring down contempt,—to save further ill luck, I printed it myself: and subsequently found an individual not unwilling to interest himself in disposing of it.

I remember one of the objections to publishing the ‘Philosophy of the Human Voice’ was—‘its not being *suited to this country*.’ I know well that the higher views of science and taste, and all originality in an individual, as being the minimum of a minority, where nothing is undertaken but through numbers and linked opinions,—are considered as con-

trary to the popular spirit of our institutions: yet upon this very belief I offered that work to the public; hoping by the diffusion of its principles, in due season to *suit the country to it*; and thus instead of being a present time server, on full but precarious wages, to endeavour to be the unhired server of an enlightened and grateful futurity.

With here and there an exception, the scoffers at this work have been those eternal enemies of improvement,—the Placemen of Learning. Supposing however that, through the influence of knowledge made light and popular and cheap, the arts are not now so far downward as to create despair of any successful efforts by a new one, before their intire decay and future revival,—I would say to many of those who hold the places and draw the profits of science, that if they will but continue to sheathe their opposition in their feigned contempt, the first humble apostles of this work may, by a gradual rise to those places and profits, see their own enlarged designs of instruction, in the course of half a century completed.

There are now several teachers and numerous friends of the system throughout the United States. Dr. Barber, an English physician, who had devoted himself to the study of elocution, and who came to Philadelphia about the period of the publication of the ‘Philosophy of the human voice,’ was the first to adopt its principles, and to defend them against the double operations of doubt and sneer, by an explanatory and illustrative course of lectures. Yale College, at New Haven, was early favorable to the system. But the University of Cambridge, by the appointment of Dr. Barber to its department of Elocution, was the first chartered institution of science that gave an influential and responsible approbation of the work.

This work furnishes, upon analysis, a system of principles for an art that heretofore has been waywardly directed by individual instinct or caprice: all therefore who design to teach



the art of reading *must* sooner or later adopt it. Will the influential instructors of Philadelphia be the last? If this city were not the place of my birth and residence, I would take upon me to answer—No.

The objections first made to ‘the Philosophy of the human voice’ were against its utility; now the cry among the learned is, that *it is too difficult*. Too difficult! Why, all new things are difficult; and if the scholastic pretender knows not this, let the annals of the trades instruct him.——Just one century has elapsed since that common material of furniture—mahogany, was first known in England. It is recorded that Dr. Gibbons, an eminent physician of that period, had a brother, a West India captain, who took over to London some planks of this wood, as ballast. The Doctor was then building a house; and his brother thought they might be of service to him. But the carpenters finding the wood *too hard for their tools*, it was laid aside for a time as useless. Soon after a candle-box being wanted in his family, Dr. Gibbons requested his cabinet maker to use some of this plank which laid in his garden. The cabinet maker also complained that it *was too hard*. The Doctor told him he must *get stronger tools*. When however, by successful means, the box was made, the Doctor ordered a bureau of the same material; the colour and polish of which were so remarkable, that he invited all his friends to view it. Among them was the Duchess of Buckingham, who being struck with its beauty, obtained some of the wood: of which a like piece of furniture was immediately made for Her Grace. Under this influence the fame of mahogany was at once established; its manufacture was then found to be in nowise difficult; and its employment for both use and ornament has since become universal.

The master-builders of science, literature and eloquence, declared ‘the Philosophy of the human voice’ to be *too hard*

*for their studious energies*; and threw it aside as useless. But a few humble cabinet makers of learning having, some how or other, *got stronger tools*, have already made the box; are under way with the bureau; and are only waiting for the authoritative influence of some leader of oratorical fashion,—to produce a general belief in the simple truism that—**IF WE WISH TO READ WELL, WE MUST FIRST LEARN HOW.**

Philadelphia, June 26, 1833.

## INTRODUCTION.

THE analysis of the human voice, contained in the following essay, was undertaken some years ago, exclusively as a subject of physiological inquiry. Upon the discovery of some essential functions of speech, I was induced to pursue the investigation; and subsequently to attempt a methodical description of all the vocal phenomena, with a view to bring the subject within the limits of science, and thereby to assist the purposes of oratorical instruction.

By every scheme of the cyclopædia, the description of the voice is classed among the duties of the physiologist; yet he has strangely neglected his part, by borrowing the small substance of his knowledge from the fancies of rhetoricians, and the dull authority of grammarians. It is time at last for physiology, of right and seriously, to take up its task.

In entering on this inquiry, I determined to avoid an express reference to the productions of former writers, until the influence of nature over the ear should be so far established, as to obviate the danger of adopting unquestioned errors, which the strongest effort of independence often finds it so difficult to avoid. Even a faint recollection of school instruction was not without its forbidding interference, with my first endeavour to discover, by the ear alone, the hidden processes of speech.

After obtaining an outline of the work of nature in the voice, sufficient to enable me to avail myself of the useful truths of other observers, and to guard against their mistakes, I consulted all accessible treatises on the subject, particularly the



European compilations of the day, the authors of which have opportunities for selection, not enjoyed in this country. Finding, on comparison, that the following history of the voice represents its nature more extensively and definitely than any known system, I am induced to offer it to the public. Many errors may be found in it; but if the leading points of analysis, and the general method be not a copy from nature, and do not prompt others to carry the subject into practical detail, I shall forever regret the publication.

It becomes me, however, to remark, that as this work has not been made up from the quoted, or controverted, or accommodated opinions of authors, I shall totally disregard any decision upon its merits, which is not made by a scrutinizing comparison with nature herself.

The art of speaking well, has, in most civilized countries, been a cherished mark of distinction between the elevated and the humble conditions of life, and has been immediately connected with some of the greater labours of ambition and taste. It may therefore appear extraordinary, that the world, with all its works of philosophy, should have been satisfied with an instinctive exercise of the art, and with occasional examples of its perfection, without an endeavour to found an analytic system of instruction, productive of more multiplied instances of success. Due reflection, however, will convince us, that even this extended purpose of the art of speaking, has been one of the causes of neglect. It has been a popular art; and works for popularity are too often the works of mediocrity. The majority of the bar, the senate, the pulpit, and the stage, deprecate the trouble of improvement: and the satisfaction of the general ear is, in no less a degree, encouraging to the faults of the voice, than the approving judgment of the million is subversive of the rigid discipline of the mind.

Physiologists have described, and classed the organic positions by which the alphabetic elements are produced. This has been done by the rule, and with the success of philosophy. Other attempts have not been so satisfactory. In treating the subject of Intonation, that is, the movement of the voice in regard to its pitch, they have not accurately measured, by some known or invented scale, the modes and degrees of such movements; and thus furnished a real detail of the economy of

speech. But they have endeavoured to determine whether the organs of the voice partake of the nature of a wind or stringed instrument—how the falsette is made—and whether acuteness and gravity are formed by variations in the dimensions of the glottis, or in the tension of its chords. After removing the organs from men and other animals, they have produced something like their living voices by blowing through them. They have inspected the cartilages and muscles of the larynx, with the purpose to discover thereby the immediate cause of intonation, when they were ignorant of the very forms of that intonation. In short, they have tried to see sound, and to touch it with the dissecting knife—and all this, without reaching any positive conclusion, or describing more of the audible effects of the anatomical structure, than was known two thousand years ago.

Instead of listening to the forms of vocal sound, and recording them, physiologists, from the time of Galen to the present, have done little more than repeat the common-places of remark and argument, with that variety only which mere capricious changes in arrangement produce.

The Greek and Roman rhetoricians, and writers on music, have recorded their knowledge of the functions of the voice. They distinguished its different qualities by such terms as hard, smooth, sharp, clear, hoarse, full, slender, flowing, flexible, shrill, and austere. They knew the time of the voice, and had a view to its quantities in pronunciation. They gave to loud and soft, appropriate places in speech. They perceived the existence of pitch, or variation of high and low: and noted further, that the rise and fall in speaking are made by a *concrete* or continuous slide of the voice. This *concrete* sound, was, by them, contra-distinguished from the change of pitch produced on musical instruments; which consists in a rise or fall to other places of pitch, without the continuous junction of the slide. This was called *discrete* sound.

The ancients however show no acquaintance with the subdivisions, definite degrees, and particular applications of these general affections, for the discriminative purposes of oratorical use: and if we may judge, from an attempt by Dionysius of Halicarnassus to point out the difference between singing and speech, and from some other descriptions, totally irreconcilable

ble with any of the present modes of intonation, we must believe that they made only a limited analysis of the voice; that the cultivation of the art of speaking was conducted altogether by imitation; and that the means of improvement were not reduced to any precise or available directions of art.

No one can read the discourse on the management of the voice, in Quintilian's elaborate chapter on action, without allowing to the ancients a power of perceiving the beauties and blemishes of speech. Yet among so many indications of their practical familiarity with the art, we find no clear description of its elements, nor any definite instruction. The abundant detail throughout his work, which more than once suggests an apology for its minuteness, precludes the supposition that he designedly omitted to describe any well known means, by which the various modes of the voice might be represented with useful precision.

It is believed that the ancient rhetoricians designated the pitch of vocal sounds by the term Accent. They made three kinds of accents, the acute, the grave, and the circumflex; signifying, severally, the rise, fall, and turn of the voice. The existence, in Greek manuscripts, of certain marks, which however were not applied till about the seventh century, afforded the only data, for modern inquiry into the nature of Greek intonation, and created a learned dispute, which has been continued without one satisfactory result, from the time of the Younger Vossius, to the recent days of Foster and Gally.

If Greek scholars had employed other means than contests with each other, for ascertaining the purpose of accentual marks, it would long ago have been determined whether they direct to any practical knowledge of Greek utterance, or are merely a subject for useless contention. If the tongue had been once consulted on this point, these symbols, even with the certainty of their alleged use, would have been rejected as vague and meagre representations of the rich and measurable variety of the voice.

The disputants found that degree of obscurity in the ancient records on accent, which encourages the profitless labours, and alternate triumphs of party; which subjects opinion to all the chicanery of sectarian argument, and shuts out the conclusive inquiries of independent observation. In the full spirit of the



old dialectic art, they 'discoursed about truth until they forgot to discover it:' and whilst they exhibit a distressing waste of time and thought and temper, by seeking in the obscurity of unfinished records, that light which would readily have arisen on their observation, they hold out to the future historians of literature, a temptation towards the sarcastic inquiry, whether the writers on Greek and Roman accent were endowed with the powers of hearing and pronunciation.

Since the decline or limitation of classic authority, modern inquirers, by listening to the sounds of their own language, have at last undertaken to discover other elemental functions of the voice, than those represented by accentual marks.

The works of Steele, Sheridan and Walker, have made large contributions to the long neglected and still craving condition of our tongue.

Mr. Joshua Steele published, at London, in the year seventeen hundred and seventy-five, 'An essay towards establishing the melody and measure of speech, to be expressed and perpetuated, by peculiar symbols.' The design of this essay was suggested by some remarks on the nature of speech, made by Lord Monboddo, in his 'Origin and progress of language;' and was executed, in part, as an argumentative correspondence between this Author and Mr. Steele.

Future times may smile at some of the effects of classical pursuits, if they should ever know that a free inquirer had considerable difficulty, in convincing a scholar, at the end of the eighteenth century, that the English language has those qualities of accent and quantity, which were supposed to belong exclusively to the Greek and Latin: for this was one of the objects in the controversy. Mr. Steele has therefore given a notation of the time of the voice: and in showing that the same concrete intonation which belonged to syllables of the Greek language, is necessarily heard on those of his own, has endeavoured, but unsuccessfully, to describe its specific application and range. The principal design of his work is, to set forth a system of rhythmic notation, by which the accidents of emphasis and pause may be represented to a pupil; and the habit of attention fixed on these great points in the art of reading.

Mr. Steele seems to have possessed nicety of ear; a knowledge of the science and practice of music; and an originality of

mind, created by observation and reflection: powers sufficient to have investigated successfully the nature of speech.

Had he pursued truth by observation instead of controversy; had he not suffered the harmless respect of a verbal decorum towards the opinions of others, to exert a secret weight of authority; had he not looked back to the ancients, and the dark confusion of their commentators, but kept his undeviating ear on nature, she would at last have led him up to light.

Mr. Sheridan is well known by his accurate and systematic investigation of the art of reading: and though he improved both the detail and method of his subject, in the departments of pronunciation, emphasis, and pause, he made no analysis of intonation. A regretted omission! The more so, from the certainty, that if this topic had seriously invited his attention, his genius and industry would have shed much light of explanation upon it.

Mr. Walker, who, by his rhetorical and philological labours, has contributed largely to the improvement of the English language, exhibits in more than one place of his works, that the varieties of intonation were studiously examined by him: indeed, he reiterates his claims to originality on this subject. Mr. Walker may have been the first to endeavour to apply the conjectural system of accents to a modern language: but he has scarcely gone beyond the analysis on which the ancient doctrine of inflection was founded. The Greek writers on music, had a discriminative knowledge of the rise, fall, and circumflex turn of speech. Aristoxenus the philosopher, a pupil of Aristotle, discovered or first described that peculiar rise and fall of sound by a concrete or continuous progression, which distinguishes the vocal slide, from the skipping or discrete transition on musical instruments.

Mr. Walker does triumphantly claim the discovery of the inverted circumflex accent, or the downward-and-upward continued movement. Yet, if it is correctly inferred from the dates of publication, and from Mr. Walker's rather derisive allusion to Mr. Steele's essay, that the latter author preceded him, he might have found, in Mr. Steele's gravo-acute accent, proof of the real existence of his newly found function of the voice.

Mr. Walker was a celebrated elocutionist, and may have

known well how to manage his intonation; but in his attempt to delineate its degrees, he is even less definite than Mr. Steele. His insinuation that music and speech, each being but varying affections of sound, should not be illustrated by some analogous notation, and his erroneous diagrams of the progress of pitch, are instances of a want of reflection and of obtuseness of ear, which would be quite reprehensible in any one, who, without compulsion, should undertake to investigate the relationships of sound.

I have thus summed up the sources, and noted the degree of our knowledge of the vocal functions. There exists a copious detail in the branches of articulation, emphasis, accent, (in its signification of stress) and pause. On the other hand, the analysis of intonation has not been carried much beyond the recorded knowledge of the ancients. Greek and Roman writers tell us, of the acute, grave, and circumflex movements; and these, with the newly described inverted-circumflex, have, at a recent date, first been formally regarded, in the art of speaking the English language.

These four general heads of intonation are truly drawn from nature: yet, with their present indefinite meaning, they are useless for practical instruction, and are no less imperfectly expressive of the measurable modifications of speech, than the four cardinal terms of the compass are descriptive of all the points, distances, and contents of space.

The discovery of the above mentioned distinctions in intonation, which must indeed form the outline of all nicer discriminations, was the result of philosophical inquiry. A much more abundant, but not more precise nomenclature has been derived from criticism. The following phrases are extracted from a description of Mr. Garrick's manner of reading the church service, and have an especial reference to the intonation of his voice.—'Even tenor of smooth regular delivery'—'Fervent tone'—'Sincerity of devotional expression'—'Repentant tone'—'Reverential tone'—'Evenness of voice'—'Tone of solemn dignity'—'Of supplication'—'Of sorrow and contrition.'

Those who know what constitutes the accuracy of terms, must confess that these, and similar attempts to name the signs of expression, have no more claims to the title of clear elemen-



tal description, than belongs to the rambling signification of vulgar nomenclature. We are not aware that no describable perceptions are associated with these phrases, until required to illustrate them by some definite discrimination of vocal sounds. 'Grandeur of feeling,' says a writer, 'should be expressed with pomp and magnificence of tone;' and we may presume, that if he had been asked how pomp and magnificence of feeling should be expressed, he would have said, by grandeur of tone. These are words, not explanations. Nor can any weight of authority give them the power of description: since the terms 'sorrowful expression,' and 'tone of solemn dignity' in the precepts of an accomplished Elocutionist, have no more precision of meaning, as to pitch, time, and force of sound, than those of 'fine turned cadence,' and 'chaste modulation,' in the idle criticism of a daily gazette.

All arts and sciences appear under two different conditions. They may be seen through the medium of terms of vague signification, adapted to the limited knowledge and feeble senses of the ignorant, in every caste of society. Those who view them under this condition, in vainly pretending to discriminate, express nothing but their approbation. In the other light, they are shown in definite delineation, by a language of unchangeable meaning; and independently of the perversions, which slender ability, natural temper, or momentary humour may create. He who thus views an art, in expressing his approbation, always discriminates.

Some branches of the art of speaking, are, even at this late period, scarcely removed from the first of these conditions. We might say, this is strange, if the causes were not so manifest. The specific constituents of intonation and force and time, have never been described: and the mind has consequently wanted that fine stimulus to attention, which abundant and definite terms always afford. The fulness of the nomenclature of an art is always directly proportional to the degree of its improvement; and the precision of its terms is generally the index of its perfection. The few and indeterminate designations of the modes of sound in Reading, compared with their number and accuracy in Music, imply the different degree of success with which each has been cultivated. The inquirers into the nature of speech, have given up their judgments to

authority, and their pens to quotation. The musician has devoted his ear to observation, and his labour to the trial of its truth. The words, quick, slow, long, short, loud, soft, rise, fall and turn, include nearly all the analytic terms of the art. How far they fall short of an enumeration of all the functions of the voice, and how fairly I have represented the present condition of our knowledge, shall be determined by an age to come, when the ear will have made deliberate examination.

A conviction of the imperfect state of our knowledge in some of the branches of the art of speaking, first suggested the design of the ensuing investigation of them: whilst a hope to influence others to assist in the completion of a desirable measurement and method of the voice, produces the present publication. If I have failed to furnish a plan for the future establishment of the principles of intonation and time and force, I must still desire to believe, without controversy, in the attainable nature, and practical benefits of such a work.

I can not withhold from this place, a few very general remarks on the importance of fixed principles in the arts; not only because these principles are the true sources of the intellectual enjoyment which the arts afford, but because they are the most effective means for their improvement. And although the entire want of such principles, for the government of intonation, has unnecessarily led to the belief that they can not be instituted, still I hope to show, in the following essay, that they are not only as essential, but likewise as attainable in Elocution, as in any other art which employs the judgment, and interests the imagination.

Those persons who receive the highest enjoyment from the works of art, know well, that its fulness and durability are derived from the wide and vivid discernment, which is acquired by a disciplined reflection on those principles of taste that directed their production. The knowledge of these principles gives power to the artist, and delight to him who contemplates the work. It is not the form, or color, or sound, which merely passes into the eye or ear, that constitutes an enlightened perception of the objects of the fine arts. Delicate organization is, indeed, essential to this perception: but it is the activity of the senses or the mind in the work of comparison, together with the application of pre-established rules, which forms the

liberal pleasure of taste. And if there is yet to be discovered some surpassing efficacy of art, it can never be attained, except through the influence of sure and multiplied principles.

Besides the means of advancement, which systematic principles afford an art, their powers are operative after a temporary decline, or total loss of its practice. They work a speedy restoration when the influence of evil example has passed away, or a tradition of former excellence has produced a desire for its revival. The definite description of elementary constituents and the statement of the rule of their use, are particularly necessary in the art of speaking well; since its exercise leaves no durable effect. The works of art, unaccompanied by the history of their production and uses, are often as deep an enigma, as the works of nature: and a long course of observation is in each case equally required, to note and class their phenomena, and to discover their efficient and final causes.

Although the ancients have left us abundant eulogistic anecdotes of the art of Painting, they have been almost silent in relation to its higher principles: and the want of these, even with the benefits of patronage, was one cause of the delay of at least two centuries, in the gradual progress to its complete restoration, in modern Europe. Stories of the graces and possible powers of ancient art were revolved in the minds of the image-makers of Italy, and of the decorators of cloisters, like the problems of the mechanical wonders of Archimedes, which were not to be solved by record or tradition.

Ancient architecture has, by the fragments of its ruins, been revived in modern days, to that degree which belongs to the dull precision of measurement: and in this view, may have all the accuracy of a copy. Delicate observation, aided by a refined taste in other arts is yet to be employed, in order to retrieve the knowledge of those principles which must have directed the varied excellence of the Greeks: but which Vitruvius perhaps designedly omitted, whilst compiling a popular book for builders; and which Pausanias, in his hurried tour, forgot to set down, as the proper preface to his inventory of temples.

If the old writers on music had not transmitted some account of the ancient scales, and their practical applications, the records of Choragic monuments, and the accounts of the



Odeum would have created in us, only a stupid wonder at all the works of sound. The inventive mind of Guido, instead of completing the modern scale, might have only laid its foundation, by fixing a single chord across a shell, and the finished system of modern harmony might now have been but just begun.

The following essay exhibits an attempt to delineate the varying modes of speech, with that precise analysis which may render criticism instructive, and afford to future times, the means of comprehending its discriminations.

The discussion of the subject of standard principles, in some of the arts, has always involved the question of their origin: and nature has generally been assumed as the source.

There are two modes through which nature affords her governing rules in the arts. In one she sets as a prototype for exact imitation, in those branches of art which profess to copy her actual details. In the other, which consists in adorning some one creation of art, by a selection from her scattered integrals of beauty, the standard grows out of that congenial judgment and feeling, exhibited in strong similarity among persons of equal cultivation, which, if it does not declare conformity in taste to be the development of irreversible nature, at least affords education effectual means to personate her.

The uses of the voice have not yet been brought to the rule of either of these conditions. Nature, or what we call nature in this case—unenlightened humanity, cannot be imitated entirely in her own aggregates; since she never furnishes a single instance worthy to be copied: and from the want of a full knowledge and definite nomenclature of the elements of speech, there has never been that clear perception of the causes of beauty and deformity, which would warrant the construction of a system upon the more artificial mode of selection. The highest achievements in statuary, painting, and the landscape, consist of those ideal forms and compositions, which are perhaps never found purely associated in nature, but which, in the estimation of taste, far surpass her individual productions.

In the following essay, the reader will find an analysis of the human voice, which will enable an Elocutionist of any nation, to reduce to established form, the best modes of speech in his language. He will also find the outline of a system of

principles that I have ventured to propose, upon a survey of those excellencies of utterance, which are accommodated to the temper and habits of the English ear; and which, in analogy with the above named arts, may be called the Ideal Beauty of speech.

I am well aware, that in this undertaking, I oppose a vulgar error. The minute distinctions, the perpetual variations, and the rapid course of utterance are considered as invincible obstacles to the palpable representation of the principles of the speaking voice. This objection will be hereafter answered, otherwise than by verbal argument. I would now only ask, if there is no opportunity to count the radii of a wheel but in the race; or to number and describe the individuals of a herd, except in the promiscuous mingling of their flight. Music, with its infinitude of details, would still have been a mystery, if the doctrine of its intervals and time, and the modes of their construction could have been caught, only from the multiplied combinations and rapid execution of the orchestra. The accuracy of mathematical calculation, joined with the sober patience of the ear over the slow practice of its elements, has not had more success in disclosing the system of this beautiful and luminous science, than a similar watchfulness over the deliberate movements of speech, will afford for the facilities of instruction, and the conscious use of its acquisitions. If there is any scope in the works of nature, or any foredoomed efficiency of means to complete the circle of her designs, we shall find, on the development of the scheme of speech, those unalterable rules, within the pale of which the voice should be variously exercised, in order to give light to the understanding, and pleasure to the ear.

The accurate sciences and the fine arts, with great inadvertence to the pretensions of each, have been set in opposition to each other, by wider antithesis, than is justified on near examination. The careless argument asserts that taste is a variable feeling, and has no rule of beauty, in the uses of form, color and sound. If the general agreement among men of equal education in the arts, approximates towards the meaning of a standard, there is not full reason for the contrariety, decreed to these departments of knowledge. Who does not know that particular excellences of the painter, poet, architect, orator,

statuary, composer, landscape improver and actor, have reached the spring of congenial perception, in those who reflect upon their works, and drawn therefrom an everduring approbation.

Though future times will probably break down the mischievous distinction, which assigns a different kind of logic to different departments of knowledge; and will subject all nature and art equally to the simple and sufficient process of observation and classification: still it may well seem to the present age, that between the perception of beauty in the arts, and of the accidents of mathematical quantity, there is little similarity. But I am aware of no other reason for the acknowledged certainty of the relationships of magnitude and number, than the general consent of those who inquire into them. We agree upon them, because we all use the same rigid rule of observation, (call it reasoning here if you will;) and because we can embrace and contemplate all the premises which are involved in a conclusion. It is trifling to urge, that the properties of a conic section would still exist as truths, though they might never be demonstrated. Truth is a term invented for the uses of a percipient being; and the question before us is of knowledge, not of notions. Otherwise we might, with like proof of an eternal rule of taste, assert that the proportions of a Greek column existed unhewn and unseen in the quarry;—like that conceit of old, which declared that the Venus of Gnidos was not the work of Praxiteles; since nature herself had concreted the boundary surface of its beauty: the artist having only produced the fragments of his chisel, and the dust of his file. I speak here against an unlimited assertion of the variability of the principles of taste, and the apathy evinced by a neglect to discover or establish them; not of an equality in precision between them and the truths of the exact sciences.

If I have rightly considered the disputed subject of taste, its controversies consist of the differences of the ignorant with artists, and with one another; and rarely of the variance of educated and intelligent artists among themselves. If the latter fail in setting their authority, or in extending the benefits of their principles over the presumptuous part of the multitude, it does not prove that a standard may not belong to the arts, or that artists do not enjoy the delightful effects of it; but that there is more assuming vanity in the world than fellowship in



knowledge. Silence or modest inquiry is the duty of the ignorant; and where neither is performed, nature seems, in their cases, to have departed from her plan in animal creation, by not withholding from them the litigious faculty of speech.

These differences can not, of themselves, call in question the authority of principles in the arts. Most of the phenomena of cause and effect, in Natural Philosophy, are as obvious as proofs of the properties of curves, by the most exact calculus. Still pretenders, in every condition of life, are constantly trespassing within the bounds of this science, by the absurdity of their reasonings with each other, on points of natural knowledge. Knaves exhibit their Perpetual Motions, and the whole host of learned and unlearned credulity can not change the influence of those principles, which at once determine the impossibility.

There is a wholesome kind of conviction on the minds of fools, which forces them to confess their want of knowledge in mathematics, if they have not studied that science. But taste, say they, is natural, therefore every one should have his own. It is true, every one knows what will please himself, in his ignorance: but the wise only know what will please the intelligent, in their education.

In thus advocating the necessity of precepts for the government of an art, I deprecate any inference that it is designed to fix an unalterable standard. Established principles should not be, as the barrier of a flood, which in protecting from inroad, restrictively prevents the opportunities of further conquest, but as the guide and escort of the arts, to acquisitions of wider glory. With the exception of the misused principle of variety, I can not name an art which has not been supported and advanced by their adoption. The search after novelty, or variety by succession, as it may be called, has, through the restless designs of vanity, and the influence of unguarded patronage, ruined more arts than all the wasting efforts of barbarism and time.

The high accomplishments in Elocution are supposed to be, universally, the unacquired gifts of genius, and to consist of powers and 'graces beyond the reach of art.' So seem the plainest services of arithmetic to a savage: and so, to the slave, seem all the ways of music, which modern art has so accurately penned as to time and tune and momentary grace. Ignorance

knows not what has been done; indolence thinks nothing can be done; and both uniting, borrow from the abused eloquence of poetry, an aphorism to justify supineness of inquiry.

It has been said that a discovery of the full resources of the arts afford the means of debasement, or of perversion from their original purposes. This indeed has sometimes been the case. By an extension of the powers of musical execution, in the voice and on instruments, this art is, through misused mechanical skill, and the waywardness of undiscerning patronage, frequently exercised to the indifference or disgust of those, whose approbation would be durable; and to the thoughtless satisfaction of those whom the caprice of ignorance may urge equally to support or to destroy.

A full knowledge of the principles and practice of an art, enables an industrious and ambitious votary to approach perfection; whilst idle followers are contented with the defaults of imitation. With most men the labour of the mind, equally with that of the body, ceases with the removal of its necessity; and the shameless dependance on the intellectual alms of others is not less common, than the populous growth of pauperism upon the increasing provisions of benevolence. The unbounded distributions of genius, prompt to excuses for indolence and to claims for succour, and the empire itself of the art, at last falls under the insurrection and anarchy of its former servile dependants.

I am thus ready to admit that a full analysis of speech, together with the establishment of a system of principles in the art, will not always exempt it from abuse or ruin. But I can not therefore, refrain from recommending a mode of cultivation, which must ensure the highest satisfaction, whilst the art remains uncorrupted, and which, by the record of its definitions and method, will afford the best means for any needed restoration.

Perhaps I am not wrong in asserting that the art of speaking well, does not consist of those accidents, which, by arbitrary use, are apt to lead to debasement. Some of the fine arts may receive the addition of Ornament, properly so called; which holding but a separable relationship to its subject or principal, leaves taste to order the degree of its application, or its total

exclusion. The art of speaking is subject to no such conditions. The embodying of sense by sound, and the coloring of feeling by its expressive modes, are fixed in their amenity by the unalterable instincts of nature, or the satisfactory decisions of convention. All addition to the numbered signs of its language is redundancy, and all misplaced utterance is affectation.

The following history of the voice is addressed especially to those who pursue science with attention and perseverance; who prefer its useful accuracy to its ostentation; who are satisfied with the ‘few—but fit audience;’—and who know, from their own happy experience, that exactness of knowledge is the bright felicity of intellect. To inquirers of this character, I need not say that even the rapid flight of speech may be more easily followed, when the general principles of its movement are understood. The hesitation of the ear will be prompted by the mind, and we shall more readily discern what is, by knowing what ought to be.

After the preceding representation of our limited knowledge of the functions of the voice, and upon the promises of a more extended and precise analysis, the reader must not be surprised to find, in the following essay, a new and copious nomenclature. When unnamed additions are made to the system and detail of an art, terms must be invented for them; and even when its known phenomena are exhibited under varied relationships, the purpose of description is less perplexed by the novelty of terms, than by an attempt to give another application or meaning to former names.

Many of the varieties of pitch having been accurately designated and clearly arranged in music, I have freely transferred its applicable nomenclature to the description of speech: and whenever a language has been purposely framed, I have endeavoured to make it, by direct or metaphorical use, purely explanatory of the nature of the vocal functions.

Although I have gone deeply into the philosophical analysis of speech, and have spared no pains or detail in illustrating whatever might, from its novelty otherwise be obscure; I have not pretended to make specific application of the principles of intonation, to all the styles of the reading and speaking voice.



This assumption of the discipline and practice of the habitual teacher, is beyond my design. I have treated the subject in that general manner which is best suited to a limited command of time. The full development of an art must be the work of many, and of their lives. I have here given the result of the leisure of about three years, snatched from the daily duty of extensive professional occupation. If in discharging the duties of that profession, I have selected from its physiological department, a subject of inquiry which gives its ultimate services in another art, I have not therein forgotten that nature, who never is ungrateful to the eyes that watch her, has still her secrets in the human frame, yet to be told for the health or happiness of man: the future search after which, may not be without success, and will not be without the satisfaction experienced in conducting these offered scrutinies of the tongue and ear.

The reception which may await the following work, can be of no important interest to me. By taking care to antedate the season of its rewards and punishments, I have already found them in the varied pleasure and perplexity of its accomplishment. I leave it therefore for the service of him who may in future desire to read the history of his voice. The system here exhibited will satisfy much of his curiosity: for I feel assured, by the result of the rigid mode of observation employed throughout the inquiry, that if science should ever come to one consent on this point, it will not differ essentially from the ensuing record. The world has long asked for light on this subject. It may not choose to accept it now: but having idly suffered its own opportunity for discovery to go by, it must, under any capricious postponement, at last receive it here.

Sir Joshua Reynolds has a pretty thought on the labours of ambition and the choice of fame. I do not remember his words exactly; but he figures the present age and posterity as rivals,—and those who receive the favour of the one, as being outcasts from the other. This condition, while it allows a full but transient satisfaction to the zeal which works only for a present reward, does not exclude all prospect from those who are contented in the anticipation of deferred success.—Truth,

whose first steps should be always vigorous and alone, is often obliged to lean for support and progress on the arm of Time; who then only, when supporting her, seems to have laid aside his wings.

Philadelphia, January, 1827.

THE  
PHILOSOPHY  
OF  
THE HUMAN VOICE.

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SECTION I.

*Of the general Divisions of Vocal Sound: with a more particular account of its Pitch.*

ALL the varieties of sound in the human voice, may be referred to the following general heads:

QUALITY,  
FORCE,  
TIME,  
ABRUPTNESS,  
PITCH.

The detail of these five genera, and of the multiplied combination of their species, includes the enumeration of the expressive powers of speech.

It would be fruitless to attempt to give an analytical history of the voice, without the use of definite terms for the appreciable modes of sound. It is therefore proper to inquire how far common nomenclature realizes the purposes of precision; and by what means any obvious deficiency may be supplied.

The terms by which the *Quality* or kind of voice is distinguished, are rough, smooth, harsh, full, thin, slender, soft, musical, and some others of the same metaphorical structure. They are sufficiently numerous; and as descriptive as possible, without reference fixed to and exemplar sounds. Some attempt towards this kind of illustration has been made, by vari-



ously distinguishing the singing voice, according to its resemblance to the sound of the reed, the string and the musical glass. The voices of inferior animals also afford analogies to the variety of quality in the human voice.

For the specifications of *Force* we use the words strong, weak, feeble, loud, soft, forcible, and faint. These are indefinite in their indication, and without any fixed relationship in degree. Music has more orderly and numerous distinguished varieties of force, by its series of terms from *Pianissimo* to *Fortissimo*. I shall have occasion hereafter to add some terms answerable to new and curious distinctions in the modes of applying this accident.

*Time*, in the art of speaking, is subdivided into long, short, quick, slow and rapid. Music has a more precise scale of relationship, in its order of signs from semibreve to double-demisemiquaver. The single or unaccompanied sound of speech does not require that nicety in Time which the concerting of music demands; yet there is need of more precision in designating its species than the usual terms of prosody afford. Mr. Steele has given, in his work, a notation of time, sufficient for all the syllabic purposes of discourse.

I shall hereafter make a division of this accident, with reference to English syllables, and to their uses in utterance.

I employ the term *Abruptness* to signify the sudden and full discharge of sound, as contradistinguished from its more gradual emission. This abruptness is well represented by the explosive notes which may be executed on the bassoon, and some other wind instruments. I have given this mode of sound a distinct title, because its characteristic is peculiar; and because it is an expressive agent in speech.

The variations of *Pitch* are denoted by the words rise and fall, high and low. In our introduction I gave an opinion on the vague import and the insufficiency of this division: and as the following history of the voice makes especial reference to this accident, and gives a minute detail of its varieties, it is necessary to adopt a full and more definite nomenclature of its degrees.

It happened well, for our assistance in developing the functions of speech, that the phenomena of pitch were long ago observed, analyzed and named in the proper science of music.

I shall endeavour to show that some of the varieties of pitch, employed by the speaking voice, are not technically known in that science. For these I have made a language. But most of the movements of the musical system are also found in speech. It is advisable therefore to adopt the musical terms for these identical functions; not only because they are already known to many, and may, through elementary treatises, be easily learned by all; but because the application of a different nomenclature to the same thing, would counteract the great object of philosophy; which is—to include all similar facts under the same nominal classes: notwithstanding their different positions in the regions of nature and art, might, through the narrow logic of words and opinions, seem to call in question their identity. I shall therefore give a concise account of the terms by which the phenomena of pitch are distinguished in music.

In entering upon this elementary and important explanation, wherein a recognition by the ear, of sounds merely described, is absolutely necessary for comprehending the subsequent parts of this work, I must beg the reader not to be discouraged by temporary difficulty. He who has been taught the principles of instrumental or vocal music, and is able to execute accurately with his voice, what is called the *Gammut*, will understand the following descriptions and definitions without much hesitation. He who knows nothing of the relations of musical sounds, nor of the regular scale on which they have been arranged, must on this, as on so many other subjects of the school which need perceptible illustration, have recourse to a living instructor. He can generally find at hand instrumental performers, or singing masters, or the precentor of some neighbouring church, who will exemplify to his satisfaction all that is merely descriptive here.

I do not refer the reader to musicians and singers, for any assistance in his application of the principles of music to the analysis of speech. The mechanical formality to which they have at last brought their science, together with the wasteful industry of their perpetual practice upon difficulties, has, generally speaking, so limited their perceptive faculty, that they are often the last to see, in the relations of other things, even the most striking analogies to the principles of their art. But their own art, merely as an art, they know well: to them

therefore I refer the reader for the exemplification of that technical nomenclature, which I have here no other means than that of words and diagram to explain.

The different degrees of Pitch in music are marked on what is called the *Scale*: the formation of which may be thus illustrated :

When the bow is drawn across any one of the strings of a Violin, and the finger at the same time gradually moved, with continued pressure on the string, from its lower attachment, to any distance upwards, a mewling sound, if I may so call it, will be heard. This mewling is caused by the gradual change from gravity to acuteness, through the successive shortening of the string: and as the sound thus rises in acuteness by an uninterrupted line of momentary changes, it is called a continuous or *Concrete* sound. This movement of pitch, on the violin, is termed a *Slide*.

The reader may himself exemplify this concrete mode of sound, by uttering the single syllable 'hay,' as if he were asking a question with the expression of earnest surprise, yet rather deliberately; beginning at the gravest and ending at the most acute point of his colloquial voice. The gradual course of sound in this case is concrete.

Now the sounds of what is called the scale in music, are not continuous or concrete, but are made—by drawing the bow whilst the finger is held stationary at certain places on the string: thus showing an interruption of the continuous upward slide. These places are seven in number, and their distances from each other are determined by a scientific rule for subdividing the string, which we need not consider here. Other sounds still ascending on the string may be made, by a similar interrupted progression. But since the second series of seven, though of higher pitch, yet adjusted by the same rule, do so accord respectively with the first seven, that they may be considered as a kind of repetition of them,—and as the same is true of other classes of seven, that may be formed between the lowest and the highest limit of sound,—the whole extent of variation in acuteness and gravity, is regarded as consisting of but the simple scale of seven sounds, in different ranges of pitch.



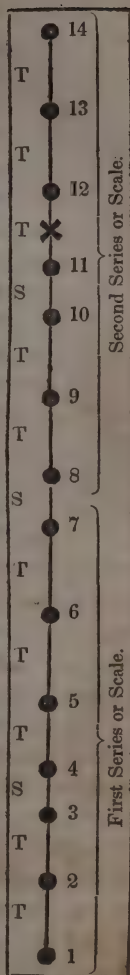
I give, in the margin, a diagram of the places at which we suppose the string to be pressed: and have marked numerically two of the repeated series of seven sounds; using the initials T and S, respectively for Tone and Semitone, to which I shall presently refer.

Upon comparing this picture with the above account of the production of concrete sound, and supposing the latter to be represented by the continued vertical line on which these black points are set, it will be seen that some of the concrete is lost, when the finger skips from place to place on the string. The sounds thus produced by intermissions of the concrete slide, are called *Discrete Sounds*.\*

The explanation which has thus been given of the manner of concrete and discrete progressions, in an upward direction, is to be understood of the downward course also, under a reverse movement of the gradual slide and skip on the string.

The variations of pitch on most musical instruments are discrete. The violin and its varieties derive much of their peculiar power in execution, from being susceptible of the concrete movement; and it is one of the great sources, as I shall show hereafter, of Expression in the human voice.

The several points at which we have supposed the sounds to be made in the discrete progression, and which are numerically designated in the diagram, are called the *Places, Points* or *Degrees* of the scale: and these are by relative position, either *Proximate* or *Remote*.



\* The idea of this continuity and disjunction of the line of pitch is perhaps known to musicians only under the names of slide and scale. The terms concrete and discrete, as here applied, are found in the higher works of the art alone, and are borrowed from mathematics; in which science they designate the two great generic divisions of quantity. Thus Magnitude is the concrete quantity; for the lines, surfaces, and solids which constitute it, have their parts, so to speak, *concreted* or united immediately with each other:—whereas Number is the dis-

The distance between any two points in the scale, whether proximate or remote, is called an *Interval*. The intervals in their proximate order are measured as follows:\*

The interval, or the quantity of concrete omitted between the first and second places, as numbered in the diagram, is called a *Tone*.

That between the second and third is likewise a *tone*.

That between the third and fourth, which appears as but half the space of a tone, is called a *Semitone*.

The interval between the fourth and fifth; fifth and sixth; sixth and seventh, is each a tone—and lastly, that between the seventh and eighth, or first of the next series, a semitone.

The intervals between the remote places or degrees of the scale, are designated numerically; the extreme degrees being inclusively counted. Thus, from the first to the fifth, and from the fourth to the eighth, is each the interval of a *Fifth*. And so of the rest.

Though the several discrete sounds of the scale are named according to their ordinal number, yet the first, relatively to its rising series, is generally called the *Key-note*: whereas the eighth, when considered in relation to the previous key-note, is called the *Octave*; for otherwise it may be regarded as itself the key-note of the following series.

The succession of the seven sounds of any one series, to which the octave is usually added, is called the *Natural* or *Diatonic Scale*. It consists of five tones and two semitones; the latter being the spaces between its third and fourth, and its seventh and eighth degrees. The scale then contains these several kinds of intervals,—a semitone; a second, or whole tone; a third; fourth; fifth; sixth; seventh; and octave.

crete quantity; since the succession of its constituent integers is altogether different from any kind of continuity.

The most familiar illustration of these terms, as applied to the two kinds of quantity in musical sound, is furnished by the form of a ladder, in which the side rails represent the concrete, and the rounds the discrete.

\* The well informed reader should regard this general view of the scale, and the manner of its illustration, with a thoughtfulness of my design. I have omitted the theoretic distinction of greater and lesser tone, of diatonic and chromatic semitone, and of the major and minor scale, together with other particulars, both melodic and harmonic, with the intention to notice only what is preparatory to the description of speech.

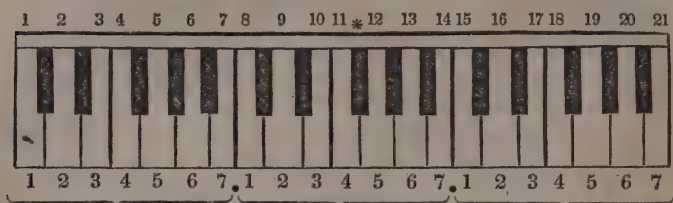
By the diagram, the interval between the second and fourth, is numerically a third, yet contains but one tone and a semi-tone : whereas, that between the first and third contains two whole tones. From this difference in extent the former is called a *Minor Third* and the latter a *Major Third*. But since the minor third is of rare occurrence in speech, the term *Third* will, in this work, always refer to the major interval; and the minor will be specified when meant.

Having thus far, by description, endeavoured to give some idea of the construction of the Musical Scale, I here advise the reader, who may not be a musician, and who may never have heard of the nature of that scale, to ask, from some qualified master, an audible exemplification of its upward and downward progression, and of its several intervals; the varied practical exercises on which are, in the language of vocal science, called *Solfaing* and *Solmization*. Let him studiously imitate this exemplification, and commit what he hears to memory. Let him not, if destitute of what is called a 'musical ear,' think he can not learn that which he now considers as a part of music. In communities where the cultivation of this art is the fashion, these things are all learned by thousands, who, with their natural ear, would never have caught up even a fragment of the commonest tune. And I am sure there is no one into whose hands this book will ever fall, who can possibly avoid perceiving the several differences of meaning or expression, when he is addressed in the language of narrative, of surprise, complaint, authority, or interrogation. Now these various expressive effects are perceptible to him, and accurately so, only because they are concrete or discrete movements of the voice through different intervals of the scale. His ear therefore really recognizes these slides and divisions in speech. I have here only given to his understanding and his tongue, their musical method and names.

When an instructor can not be met with, the use of a well tuned Piano-Forte may assist the perception of those who have no acquaintance with the scale. On the key-board of this instrument there is a front row of white keys, as they are called, and a rear row of black ones: an illustration of the forms and positions of which is given in the following diagram; where a



portion of the *Great Scale or Compass* of the instrument is shown; and the white keys numbered in repeated septenary series; and in continuation as far as twenty-one.



Now certain series of the white keys,—of which there are three in the diagram, the first beginning on its extreme left,—when struck successively ascending towards the right, give the seven discrete rising sounds of the diatonic scale. The black keys, whose effect in modifying this scale will be noticed presently, are set between the white ones, for the purpose of dividing the whole tones into semitones. Hence we see that the black keys are wanting at the semitonic intervals of the scale, where, of course, their design can not apply. This omission visibly separates the black keys alternately into pairs and triplets.

With the foregoing explanation, the reader can have no difficulty in finding a diatonic series on the white keys of a Piano-Forte, since the key-note or beginning of the series always lies next below the pair of black keys. Let him then, on that series which suits the pitch of his speaking voice, severally utter the vowels, and some of their syllabic combinations, in unison with the instrumental sounds, both in their diatonic order, and with the wider transitions of the other intervals of the scale, till the whole is familiar to his ear, and at the call of his memory. It is true the Piano-Forte can show him only the discrete movements of pitch; but when these are under his command, the concrete, which are perhaps the most important in speech, can readily be measured by them. But to return to our definitions,—

The sound produced at any of the places of the discrete scale, is called a *Note*. This term note, which signifies the continuation of sound on one unvarying line of pitch, is to be carefully

distinguished from that of *Tone*. The term tone in this essay, applies—either to the rising or falling of the voice through any two proximate degrees of the scale, except those which make the semitones, in the case of concrete sound ;—or to the amount of space between such degrees, when the concrete is omitted, in the case of discrete sounds.

As the term tone is thus used under two conditions, so are the terms of other intervals included between remote degrees : for the voice may move concretely through those intervals, or notes may be made at those degrees, with the omission of the concrete. Let us call the former of these conditions, *Concrete Intervals*, and the latter *Discrete Intervals*.

The *first*, *third* and *fifth* notes of the diatonic scale, to which the *octave*, as a sort of repetition of the first, is usually added, differ from the rest, in being more agreeable to the ear when heard in continuation. The third, fifth and octave, are also more readily hit by an inexperienced voice, in an endeavour to execute the several discrete intervals of the scale. That simple instrument called the Jews-harp, and some of the horn species, more easily yield these notes under the faltering attempts of a learner. When the reader is taking his lessons on the scale, let him make his ear especially familiar with the last named intervals : much reference will be made to that knowledge, in the future parts of this work.

I give below a representation of the manner in which musicians set their symbols for the diatonic sounds, on that linear table called the *Staff*. This staff consists of five horizontal parallel lines, having four spaces between them. Each space and line represents a degree of the scale ; so that from space to line, and line to space, when they adjoin, is a second : and these degrees are called *conjoint* or *proximate*. When the discrete movement is over a wider interval than a second, it is called a *Skip*. The succession of the scale is here marked by black points, rising from the lowest line to the highest space of the staff : the intervals of the semitones being designated by a brace.



I have thus endeavoured to describe the concrete movement of sound, and its discrete progression through the diatonic scale. But the discrete form of pitch appears under further subdivisions, which are effected in the following manner.

In any series of seven notes, as the first marked in the preceding vertical diagram of the scale, and in that of the key-board, let us assume the *Fifth*, as the first of a new series. This, with its octave, will extend to the place numbered twelve. Six of its places in their rising order will have right positions; and thus far the intervals of tone and semitone will exhibit the proper successions of the diatonic scale. But the interval between the tenth and eleventh is a semitone, and that between the eleventh and twelfth, a tone: whereas, by the rule of the scale the order should be reversed. For the tenth, eleventh and twelfth, marked in the diagrams, are respectively the sixth, seventh and eighth of the new series assumed from the fifth. If now the intervals from eleven to twelve be subdivided into two semitones, as shown by a cross in the vertical diagram, and a star in that of the key-board, and if the transit be made from the tenth place to this point of division, two semitones, making thus one whole tone, will be passed over, the interval from this middle point to the twelfth will be a semitone, and in this way the constituent intervals of the diatonic scale will be obtained.

And further, if we take the fifth above the key-note of this new series, or the fourth below it, which are represented respectively by the ninth and the second of the diagrams, and which are considered the same, because they have the like position of second in the two series, as shown in the key-board: then a similar subdivision of the whole tone, between the fifteenth and sixteenth, will be necessary, with the use of the former subdivision, to construct the scale. And thus progressively, by taking the fifth of the last series, or the fourth below it, every place of the scale may become the first of a series; and every whole tone may thereby be divided, as shown by the black keys in the diagram of the key-board. This division produces a series of semitones. When therefore the progression is made by them, the order of degrees is called the *Semitonic* or more commonly the *Chromatic Scale*.

But it is necessary for my purpose in the future history of



speech, that the succession of discrete sounds should be exhibited under still more reduced divisions. These consist in a transition from place to place in pitch, over intervals much smaller than a semitone : each point being, as it were, rapidly touched by a short and abrupt emission of voice. This description may be illustrated by the manner of that noise in the throat which is called gurgling ; and by the neighing of a horse. The analogy here regards principally the momentary duration, frequency and abruptness of sound ; for the gurgling is generally made by a quick iteration in one unvarying line of pitch. But in the scale now under consideration, each successive pulse of sound is taken at a minute interval above the last, till the series reaches the octave. We can not tell the precise extent of these small intervals, nor the number of pulses in given portions of the scales, since this function is executed in a manner, and with a rapidity which prevent discrimination. Nor are these points material now. My purpose requires it to be known that the voice does rise and fall, with short and abrupt iterations through the whole extent of pitch, by steps less than a semitone. Whether the discrete space is that fractional part of a tone which is called a *comma*, or some division or multiple of it, I leave to be determined among theorists, by other means than that of the ear alone.

Let us then call this species of movement the *Tremulous Scale*.

I have thus described four modes of the progressions of pitch : and though in speaking of the concrete, I did not call its slide a scale, since its unbroken line has no analogy with the interrupted steps of a discrete succession : yet with a full understanding of its nature, there can be no objection to its being so called.

There are then *Four* scales of pitch. The *Concrete*, in which, from the outset to the termination of the voice, there is no appreciable interval, or interruption of continuity.

The *Diatonic*, whose transitions are principally by whole tones.

The *Chromatic*, consisting of an entire succession of semitones : and,

The *Tremulous*, which with its minute intervals, has never, so far as I know, been employed upon musical instruments :

the trill or shake being, as I shall show hereafter, a totally distinct function.

For the purpose of explanation, the scales have been represented separately, though in the practice of the voice they are variously united : and I have been thus particular in their detail, since speech makes use of them all. The concrete is constantly found : and we shall hereafter learn in what manner the diatonic, chromatic and tremulous scales are joined with it.

The term *Melody* is applied to a regulated vocal or instrumental use of all those modes of pitch which are described in the above named scales. The full meaning of the term embraces the further relations of time, rythmus and pause : but I here speak of pitch alone. That agreeable effect of tune called melody is produced by a succession of the notes of the scale, under every permutation, of which, its seven elements, in a proximate or skipping progression, are capable. We shall find hereafter that the melody of speech, is founded on the same principle of varied intervals : whilst it has at the same time peculiarities, arising from its concrete and tremulous movements, and from not being affected by the doctrine of what in music is called *Key*.

The term *Key* is applied to each of the several series of the diatonic scale, which may be made upon musical instruments. And as it appears by the diagram of the key-board, that the semitonic divisions of the whole tones of the scale make twelve places, from each of which a diatonic succession may be arranged, so the scale of the piano-forte admits of twelve different *keys*. The first note of the succession is called, as we said formerly, the *key-note*. The relationship of this to the other notes of the scale is such, that a melody will appear unfinished, if its last sound be not the key-note of the scale, or the octave to it, which is its nearest concord.

It is a condition in music, that a melody formed of the varied permutations of the notes of any one key shall not employ the constituent notes of another. Thus in the vertical diagram, there is a series, with its key-note at number one ; and another with its key-note at five. But to form the last we found it necessary to divide the tone between the eleventh and twelfth points, in order to obtain the final semitone of the diatonic scale : and it appears that all the notes are common to the two series,

except the seventh of this last. Now a melody or tune begun on the first series, can not employ that seventh and be agreeable to the ear, but with an express design to leave the first series, and afterwards to carry on the tune altogether by the notes of the last. This transition from one series to another is called *Modulation*, or Changing the key.

*Intonation* signifies the act of performing the movements of pitch through the several scales, in song and in instrumental execution. It therefore regards merely the changes of sound between acuteness and gravity. Thus we say,—the emphasis and accent of speech have long been subjects of inquiry, but its *intonation* has been entirely overlooked. Intonation is said to be correct or true, when the discrete steps or concrete slides over the intended interval are made with exactness. Deviation from this precision is called singing or playing false.

The term *Cadence* means the consummation of the desire for a full close in the melody, by the resting of its last sound in the key note.

I have thus endeavoured to prepare the reader for all that relates to the science and nomenclature of music, in the following description of speech. When the analytic principles of the voice will have become familiar, through general instruction and practice, the Art of Speaking will seem to offer less difficulty, by having an acknowledged system and nomenclature of its own. Now we are obliged to study another art, in order to make one of it.

In the preceding explanations, I have gone rather beyond what is absolutely necessary for comprehending the proper science of Analytic Elocution, now to be first set forth : for I have described, with some care, the nature of Key and Modulation in music, although speech is not constructed upon the principles of either. I presumed, however, that it would not be uninteresting to some inquirers to know wherein the differences of the cases consist.

I feel how perplexing it is, I was about to say, it is impossible, to render the separated parts of a science, so well divided in method yet so closely related in detail, as that of music, clearly intelligible. But if what has been said will enable the reader to understand the system and particulars of the four



scales, and to execute them, he will not have much difficulty in pursuing our further history of a new and beautiful science of the human voice.



## SECTION II.

### *Of the Radical and Vanishing movement of the voice, and its different forms in Speech, Song and Recitative.*

WE have been willing to believe, on faith alone, that nature is wise in the contrivance of speech. Let us now show, by our works of analysis, how she manages the simple elements of the voice, in the production of their unbounded combinations.

When the letter 'a,' as heard in the word 'day,' is pronounced simply as an alphabetic element, without intensity or emotion, and as if it were a continuation and not a close of utterance, two sounds are heard continuously successive. The first has the nominal sound of this letter; and issues from the organs with a certain degree of fulness. The last is the element 'e,' as heard in 'eve,' which gradually diminishes until its close. During the pronunciation, the voice rises by the concrete movement through the interval of a tone; the beginning of the 'a' and the termination of the 'e' being severally the inferior and superior extremes of that tone.

As the description here given, may not in practice, be at once recognized by the reader, on account of the limited extent of the concrete, its delicate structure, and momentary duration, I shall endeavour to throw some particular light of explanation upon it.

That the sound expressed by the letter 'a,' when thus uttered concretely, has the *diphthongal* character, will be obvious

on deliberately drawing out this single element, as if it were a question put with great surprise. For in this case its commencement will be what I have called the nominal 'a,' and its sharp termination in 'e,' at a high pitch will be no less distinguishable.

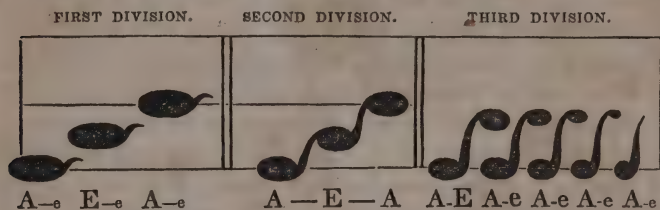
By the same mode of interrogation, the *fulness* or greater volume of sound upon 'a,' and the *diminishing* close in 'e,' will be equally obvious to an attentive ear. And it is not improbable that the feebleness of this last constituent of 'a,' in its ordinary pronunciation, is at least one cause that the diphthongal structure of this element, has, so far as I know, never before been recognized.

Now, that 'a,' when uttered simply as the head of the alphabet, without any striking expression, and as if it were a continuation not a close of speech,—does rise through the concrete of a *tone*, may be made manifest to the reader, by his ability to intonate the diatonic scale. For let him ascend discretely by the alternate use of 'a' and 'e,' prolonging each as a *note*, and making a slight pause between them. This will render him familiar with the relationship of the two elements, when heard on the extremes of a tone; as illustrated by the first division of the following diagram, where three degrees of the scale are shown; the notes after their prolongation having a slight diminishing issue, which is represented by a small 'e' subjoined to the larger letters that designate the prolonged notes.

Then let him ascend the scale by a kind of union of the concrete and discrete progressions; that is by beginning with 'a' slightly prolonged, and proceeding to 'e' in the second place, without breaking the continuity of sound, and thence after slightly prolonging the 'e,' passing concretely to 'a' in the third place; as illustrated by the second division of the diagram, where full notes are connected by slender concretes. This practice will make him familiar with the effects of a concrete rise through a tone, when the upper extreme is rendered remarkable, by the stress and prolongation it receives at the second place of the scale.

Supposing then the interval of a tone to be distinguishable, when thus uttered with a full volume of sound on 'a' continued into a like volume on 'e,' or with what may be called a double stress; it may be proved in the following manner that the sim-

ple utterance of 'a' in 'day,' passes through a like interval. — Let the 'a' and 'e' be repeatedly pronounced with this double stress, till the effect of the interval, is for the moment impressed upon the ear. Then let the stress on 'e' be gradually lessened in the repetition: as illustrated by the series of symbols in the third division of the diagram. The audible effect, even with this diminution, will so resemble that of the double stress, that the cases, as far as regards intonation, will be admitted as identical. For as the interval is plainly cognizable, when both extremes receive the stress, so in returning to the simple pronunciation of 'a,' the perception of this interval will be kept up through the gradual progress of the change.



If there should at any time be a doubt as to the extent of the concrete interval, let stress be applied at its summit. When the interval is a tone, the two sounds will form the commencement of the diatonic scale: for with a little experience the course of this scale can always be recognized, upon the execution of its first and second degrees.

The diphthongal sound of 'a' does then in this case pass through the concrete interval of a tone; the movement being divided between the sounds of 'a' and 'e,' the first gliding imperceptibly into the last. But as the question here refers to the extent of the interval traversed, and to its upward direction, as well as to its concrete progress, it is necessary to guard against the utterance of the literal element with any emotion: for if it be done in a plaintive manner, with surprise, interrogation, or other impressive sentiments, or as if it were the close of a sentence, the concrete will be some other interval than the tone, or will move in a downward direction; this tone or second, being as will be shown hereafter, the instinctive mode of intonation, by which the mind denotes its simple thoughts, exclusively of feeling or passion.



The peculiar structure of this concrete rise suggested the division of it, by terms, into two parts; and the use of this division, for explanatory purposes in the following history, will show its propriety.

I have called the first part, or that of 'a' in the above instance, the *Radical movement*; because, with a full beginning or opening, the following portion of the concrete rises from it as from a base or root.

I have called the last portion, or that of 'e' in the example, the *Vanishing movement*, from its becoming gradually weaker as it rises, and finally dying away in the upper extreme of the tone.

It must strike the reader that these terms can have only a general reference to the two extremes of the concrete, since the gradual change of the radical into the vanishing movement, prevents our assigning an exact point of distinction between them.

When a single alphabetic sound, capable of prolongation, is uttered with propriety and smoothness, and without emotion, it commences full and somewhat abruptly, and gradually decreases in its upward movement: having the increments of time, and rise, and the decrements of fullness, equably progressive. That is, supposing a gradual diminution of fullness of voice in its gradual rise through a tone, to be effected in a given time—one half or smaller fraction of that rise and diminution will be accomplished in one half or smaller fraction of that time. Let us call this movement the *Equable Concrete*.

The varied mode of the syllabic function in Song and Recitative, may help to illustrate the nature of this equability of the rising movement of speech.

The long drawn voice of one continued pitch, which we hear in Song and Recitative, is produced in two ways.

First; by giving the greatest proportion of time and volume to a level line of sound, if I may so call it, in the radical place; and by subsequently passing concretely, lightly, and rapidly through the vanishing portion. Let us call this the *Protracted Radical*.

Secondly; by passing concretely, lightly, and rapidly through the radical portion, and then dwelling with greater

volume on a level line in the highest place of the vanish. Let us call this the *Protracted Vanish*.

Thus far then, intonation exhibits three modifications of the radical and vanishing movement. The Equable Concrete of speech:—The Protracted Radical, and the Protracted Vanish, both of which are used in Song and Recitative. But we shall have occasion to learn, as we proceed, the various relationships of the concrete, to all the simple and compounded intervals, to the alphabetic elements, to time and to force:

I have spoken of the radical and vanishing movement through a tone, with a view to explain by that interval, the nature of the concrete rise, and its division into the parts which have been named. But in taking a wider survey of this subject, we shall learn, that this function, with all its properties, is performed on every other interval of the scale.

Recurring to the illustration by the second division of the last diagram, if we ascend concretely to the octave by the alternate use of ‘a’ and ‘e’ this continuous movement between the two last places, or from the seventh to the eighth, will produce a different effect from that between the first and second, or the tone. The voice will have a plaintive character. Now the interval from the seventh to the eighth place of the diatonic scale, is a semitone. This plaintive concrete rise is then the radical and vanishing movement through a semitone.

By a process analogous to that proposed for distinguishing the interval of the tone and semitone, it may be ascertained that the voice employs a similar mode of progression through other intervals: thereby proving the existence of a *Rising*, radical and vanishing semitone,—tone or second,—major and minor third,—fifth,—and octave. But these intervals have their proper significations in the expression of speech, and will be particularly noticed elsewhere.

I say nothing here of a radical and vanishing fourth,—sixth, and seventh; nor of higher ranges than the octave; not because the voice does not perform these intervals, but because a reference to the above named points, is sufficiently precise for the purposes of our history.

Let us consider another condition of the radical and vanishing movement. We have viewed the concrete of the voice only in its rising progress. There is a similar glide in a down-

ward direction through all the intervals of the scale. Referring to the mode of illustration formerly proposed, if the bow be drawn whilst the finger is moving continually from the eighth place on the string to the first, it will produce the concrete descending sound of the octave. And in like manner, by taking other parts of the scale as the commencement of a descending course, all the other downward intervals may be made. The trial by the voice will exhibit a similar downward continuous sound: for after ascending the diatonic scale by the diphthongal concrete of 'a' and 'e,' if we descend by the alternate use of these sounds, beginning with 'a' on the eighth place, we shall hear the continuous movement between all the points of the downward scale. In the first interval of the descending series, we have the concrete downward semitone; and in the last, the tone. And in like manner, by a previous rise to the place of a third, fifth and octave, and a consequent descent, we may prove the existence of a *Downward* radical and vanishing third,—fifth,—and octave.

Now if this simple phrase 'farewell a' be uttered without emotion, and with a complete fall of the voice, as if it were the close of a sentence, the downward concrete tone will be heard on 'a' with all the properties which belong to the radical and vanishing movement, in their ising direction: with this difference, that the radical, if I may now so call it, is at the summit of the tone; whilst the vanish flows dwindling from it to the lower extreme of this interval; the 'e' faintly subsiding there.

He who is acquainted with the musical scale, but who has not yet looked upon it in reference to speech, may ascertain the upward intonation of the tone and semitone, when made upon any vowel sound, by a comparison of their effects with the beginning and the end of the rising order of the scale. And in like manner, he may know the downward courses of the semitone and tone, by comparing them respectively with the beginning and end of the descending scale. Every one knows a plaintive expression in speech; therefore it is easy to discriminate a semitone. And I have full confidence in asserting, that before the attentive reader has finished this essay, he will have no more difficulty in recognizing every other important interval of the rising and falling movement.



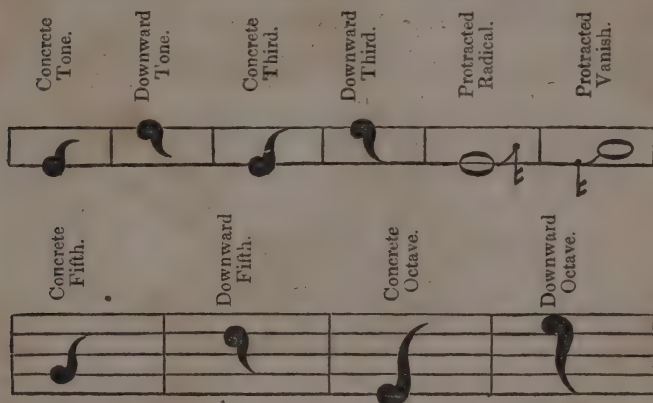
In describing the rising radical and vanish of the tone, I contradistinguished the concrete syllabic voice from the protracted radical and vanish of that same interval. But it will be shown hereafter, that Song employs a similar mode of intonation on wider intervals: that is, the protracted radical and vanish are used in continuation with a following or a preceding concrete of wider rising intervals, and the like protracted notes are joined respectively to the summit and the foot of the wider concretes of a downward direction.

As the concrete rise of the voice is perhaps more generally used in speech, than the downward course, I shall, in noticing intervals, employ the term radical and vanishing movement, without specifying its rise, to signify the former; and shall particularize the latter, by annexing the term of its direction. In designating the concrete function, I shall variously denominate it, the radical and vanishing movement,—progress,—interval,—or pitch; or simply the radical and vanish,—or the concrete; or the radical and vanishing tone,—semitone,—third,—fifth,—and octave, according to the general or specific intention.

I have thus endeavoured to describe one of the most important functions of speech. There is a peculiarity in the intonation of the human voice, which has never been copied by instrumental contrivance. The sounds of the horn, flute, reed, and musical glass, may each equal and even surpass in quality a long drawn vocal note; but there is still something absent, that designates them as instruments. It is the want of the gliding concrete, the lessening volume, and the soft extinction of the yet inimitable vanishing movement.

The illustration by a diagram may perhaps facilitate the comprehension of the foregoing descriptions. For this purpose I use below, certain parts of the musical notation. The lines and spaces denote places of pitch; the proximate succession being that of a tone. These lines and spaces differ from the staff of the musical system: the latter being founded on the diatonic scale, denotes, in certain places, the interval of a semitone; whereas the lines and spaces of the notation for speech signify always, the succession of a tone, except when otherwise specified. The full black marks on these lines and spaces, with their issuing appendages of various extent, represent the open-

ing fulness, direction, interval and diminution of the radical and vanishing movement. The whole of this notation being mere metaphor, there is no meaning in the curve given to the sign of the vanish. In that I have consulted only the eye. Time is here represented as in music : the open ellipse signifying the longest ; the black head with a stem, the fourth of it ; this head with its stem marked at the extremity by one and two hooks, each successively the eighth and sixteenth of the open ellipse. — Except for the prolonged radical and vanish, it is not my intention to use the notation of time, in this essay. This subject has been well analyzed, and clearly arranged in music ; and the application of its well contrived symbols to speech, when desirable, will not require much ingenuity or labour.



I have not represented the semitone, since its mode of delineation may be easily understood from the picture of the other intervals. The circumstances of its notation will be considered in a future section.

The reader must not be discouraged by the seeming difficulty of the foregoing distinctions. I have here laid down, as a didactic rule, the very train by which these phenomena were discovered. They were not seen at a glance. The first views were full of indistinctness and doubt, greater perhaps than a quick student may experience from the descriptions in this section : yet I can declare that now after three years, the functions here explained, are much more perceptible to me, than the varieties of color without direct comparison ; and quite as distinct as the literal and syllabic sounds of discourse.

## SECTION III.

*Of the Elementary Sounds of the English Language;  
with their Relations to the Radical and  
Vanishing Movement.*

THE radical and vanishing concrete, under all its forms, is employed on a limited number of sounds, which in the English language amount to thirty-five. The deficiencies, redundancies, and confusion of the system of alphabetic characters in this language, prevent the adoption of its subdivisions in this essay.

An alphabet should consist of a separate symbol for every elementary sound : and it appears to me that the best practical arrangement of the elements, would be that which regards their use in discourse. It will not be denied that intonation is one of the most important functions of speech : consequently the ordering of the elements should have some reference to it. In the present section therefore, these elements will be described and classed according to their use in intonation.\*

\* I set aside, in this place at least, the sacred division into vowels, consonants, mutes and semivowels. The complete history of nature will consist of a full description of all the relationships of things. We received the classification of the alphabet from Greek and Roman grammarians: and their division, according to organic causes, into labial, lingual, dental and nasal elements, is to be regarded as a legitimate part of that history. But whatever motive connected with the vocal habits of another nation, or the etymologies of another tongue, may have justified the division into vowels and consonants under their present meaning, it does not now exist with us. Without designing to overlook or destroy any arrangement which truly represents the relationships of these sounds, it is only intended to add to their history, a classification grounded on their important functions in speech. The strictness of philosophy should not be so far forgotten, as to suffer the claim of this classification to be exclusive. Let it remain as a constituent portion only of new and wider prospects, yet to be opened in the art.

Passing by other assailable points of our immemorial system, the distinction, implied by its two leading heads, is a misrepresentation. Had he an ear who said—a consonant can not be sounded without the help of a vowel?

Among the thousand mismanagements of literary instruction, there is at the out-



As the number of elementary sounds in the English language exceeds the literal signs, some of the letters are made to represent various sounds, without a rule for discrimination. I shall endeavour to supply this want of precision by using short words of known pronunciation, containing the elementary sounds, with the letters which represent them marked in italics.

The thirty-five elements are now to be considered under their relationships to the radical and vanishing movement. And as the properties of this function are—prolongation of sound, variation of pitch, with initial force and final feebleness; these elements should be viewed in their varied capacity for admitting the display of these properties.

Our elements of articulation may be arranged under three general heads.

The first division embraces those sounds which display the properties of the radical and vanish in the most perfect manner. They are twelve in number; and are heard in the usual sound of the separated italics, in the following words:

*A*-ll, *a*-rt, *a*-n, *a*-le, *ou*-r, *i*-sle, *o*-ld, *ee*-l, *oo*-ze, *e*-rr, *e*-nd, *i*-n.

From their forming the purest and most plastic material of intonation, I have called them Tonic sounds.

They consist of different sorts of *vocality*; by which I mean that 'raucus' quality of voice which is contradistinguished from a whisper or aspiration. They are produced by the joint functions of the larynx and parts of the internal and external mouth, through which the air must pass in their formation.

The tonics have a more musical quality than the other ele-

set in the horn book, the pretence to represent elementary sounds by syllables composed of two or more elements, as: Be, Kay, Zed, double U, and Aitch. These words are used in infancy, and through life, as simple elements in the process of synthetic spelling. If the definition of a consonant was made by the master from the practice of the child, it might suggest pity for the pedagogue, but should not make us forget the realities of nature.

Any pronouncing dictionary shows that consonants alone may form syllables; and if they have never been appropriated to words which might stand solitary in a sentence like the vowels 'a,' 'i,' 'o,' 'ah' and 'awe'—it is not because they can not be so used; but because they have not that full and manageable nature which exhibits the functions of the unconnected syllable with sufficient emphasis, and with agreeable effect.

ments : they are capable of indefinite prolongation: admit of the concrete and tremulous rise and fall through all the intervals of pitch: and may be uttered more forcibly than the other elementary sounds, as well as with more abruptness: and whilst these two last characteristics are appropriate to the natural fulness and stress of the radical, the power of prolongation, upon their pure and musical quality, is finely accommodated to the delicate structure of the vanishing movement.

The next division includes a number of sounds, possessing variously among themselves properties analogous to those of the tonics; but differing in degree. They amount to fourteen; and are marked by the separated italics, in the following words:

*B-ow, d-are, g-ive, v-ile, z-one, y-e, w-o, th-en, a-z-ure, si-ng, l-ove, m-ay, n-ot, r-oe.*

From their inferiority to the tonics, in all the emphatic and elegant purposes of speech, whilst they admit of being intonated or carried concretely through the intervals of pitch, I have called them Subtonic sounds.

They all have a vocality; but in some it is combined with an aspiration. *B, d, g, ng, l, m, n, r*, have an unmingled vocality; *v, z, y, w, th, zh*, have an aspiration joined with theirs. We have learned that the vocality of the tonics is, in each, peculiar in sort. The vocality of some of the subtonics is apparently the same; and among all, it does not differ much; resembling certain five of the tonics, which will be designated presently. Like the vocality of the tonics, it is formed in the larynx: but instead of passing altogether through the mouth, it has its reverberations in the back of the mouth, and the cavities of the nose. Some of the subtonic vocalities are purely nasal, as: *m, n, ng, b, d, g*. The rest are partly oral. The nasal are soon silenced by closing the nostrils: the rest are not materially affected by it. The vocality of *b, d* and *g* may not be immediately apparent to those who have not, by practice in the abstract utterance of the alphabet, attained the full command of pronunciation. Writers, in noticing these letters, have spoken of it under the name of ‘guttural murmur,’ and have regarded it as a peculiar sound; whereas it is the identical vocality, heard in *v, th-en, z, zh*, and *r*, subsequently modified by the contact of organs, into

the respective individuality of *b*, *d* and *g*. The vocality of *b*, *d* and *g*, in ordinary speech, has less time and intensity, and is consequently less perceptible than that of *v*, *th-en*, *z*, *zh* and *r*, but it is the same in kind. It is the vocality alone of *b* that distinguishes it from *p*.

I have enumerated *y* and *w* as the initial sounds of 'ye' and 'wo,' because 'y' is a vocality, like that of the other subtonics, mixed with an aspiration made over the tongue, when raised near the roof of the mouth : and because 'w' is a similar vocality mixed with a breathing through an aperture in the protruded lips. As *b*, *d*, *g* and *zh* are made by joining vocalities, instead of aspirations, with the organic positions of *p*, *t*, *k* and *sh*; so *y* and *w* are severally the mixture of vocality with the pure aspiration of 'h' as heard in 'he,' and of 'wh' as heard in 'whirl'd' The addition to the aspiration changes these words respectively to 'ye' and 'world.'

This vocality of the subtonics, whether pure or mixed, nasal or oral, is variously modified by the nose, tongue, teeth and lips. For, an entire or partial obstruction of the current of breath through the mouth, and a subsequent removal of the obstruction, produces the peculiar sound of the subtonics. Now it is in the portion of the subtonic sound, heard after the restoration of the free passage through the mouth, that the character of the vocality, in some of these elements, may be most easily perceived. This *vacula* or little voice, if I may so call it, is mentioned by writers as being necessary to complete the utterance of the class of mutes, so named : but it may be heard more or less conspicuously at the termination of all the subtonics. It is least perceptible in those which have the most aspiration. In ordinary utterance it is short and feeble ; and is most obvious when employed in forcible or affected pronunciation. When the subtonics precede the tonics in words, they lose this short and feeble termination, and takes in its place the full sound of the succeeding tonic, thus producing an abrupt opening of the tonic.

I have called this last vented sound of the subtonics the *Vocule* ; and have been thus particular in noticing and naming it, because I shall hereafter use the term and consider the power of the function, in treating of the expression of the voice.

The five tonic sounds to which the vocalities of the subtonics



bear a resemblance, are *ee-l*, *oo-ze*, *e-rr*, *e-nd*, *i-n*. *Y-e* and *w-o* have respectively something like a nasal echo of *ee-l* and *oo-ze*. *B*, *d*, *g*, *v*, *th-en*, *z*, *zh* and *r* resemble *e-rr*; *l*, *m*, and *n* have something of the sound of *e-nd*; and *ng*, of *i-n*.

I said the subtonics are subordinate to the tonics in their properties and uses. The kind of sound is less agreeable. That clearness and brilliancy of the tonics, is obscured in the purest of them, and in some it is destroyed, by the aspiration. They are severally capable of more or less prolongation, and may be carried through the concrete and tremulous variation of pitch. None admit of much force in their vocality; nor can abruptness be given to them without extraordinary effort. Now these last named insufficiencies prevent the subtonics from forming, like the tonics, the proper radical movement: the characteristic of which consists in its opening full and abruptly. When therefore a subtonic precedes a tonic, as in the syllable 'vain,' the vocality of 'v' compared with 'a' is so feeble, that upon a common effort of utterance, it does not exhibit the strong and sudden opening of the radical. It does indeed make part of the syllable, but to whatever degree it may be prolonged, it still continues on one line of pitch until the tonic 'a' opens and rises with the true character of the radical. I do not say, the subtonics can not form radicals, for all of them, when separately uttered, may be carried by the concrete movement, through every interval; and even in conjunction with tonics, a strenuous effort may give them somewhat of the radical abruptness. But in ordinary pronunciation, they are scarcely appreciated as a part of the initial concrete.

This want of force and abruptness in a subtonic does not prevent it from fulfilling the purpose of the vanish, when it succeeds a tonic. Thus in the syllable 'vain,' the 'a,' as we have said, begins the radical, and after rising through a portion of the interval, glides into the subtonic 'n,' which carries on and completes the vanish.

The remaining nine elements are Aspirations, and have not that sort of sound which I have called vocality. They are produced by a current of the whispering breath through certain positions of parts, in the internal and external mouth. They are heard in the words,

*U-p*, *ou-t*, *ar-k*, *i-f*, *ye-s*, *h-e*, *wh-eat*, *th-in*, *pu-sh*.

From their limited power of variation in pitch, even when uttered singly, with the designed effort to produce it, and from their supplying no part of the concrete when breathed among the constituents of syllables, I have called them Atonic sounds.

If any one will take the trouble to compare the mode of their production with that of some of the subtonics, he will find them respectively identical in all their accidents, except that of vocality, which is wanting in the atonics.—

B.	D.	G.	V.	Z.	Y.	W.	Th.	Zh.	Ng.	L.	M.	N.	R.
P.	T.	K.	F.	S.	H.	Wh.	Th.	Sh.					

This whispering imitation is not made on all the subtonics. Yet the five exceptions do not altogether destroy the idea, that nature has her *nisus* towards a general rule of duplicature in these creations. The *m*, *n*, and *ng* are purely nasal, and when their vocality is dropped, the attempt to utter them, by the mere breathing of the atonics, produces in each case similar snuffling expirations. Yet even this snuffling, though no reputed element of speech, is constantly used before the vocality of *n* or *m* or *ng*, as the inarticulate symbol of a sneer. The two remaining subtonics *l* and *r*, in perfect English speech, are unmatched by atonics. But the aspirated copy of the *l*, produced by a kind of hissing over the moisture of the tongue, is not a very uncommon deformity of utterance: and a true atonic parallel to the *r*, heard in what is called 'the burr,' is perhaps a still more prevalent defect of utterance.\*

The atonics, from the deficiency which suggested their name, afford no basis for the function of the radical and vanish. Most of them have a perceptible vocule, which consists in a short aspiration like the whispering of *e-rr*. There is no musical quality in their sound. They do furnish time to speech, but on a wretched material. Though inferior in most of their qualities to the other elements, yet I shall show in treating of the expression of speech, that the Aspiration is both significative, and emphatic.

\* Bishop Wilkins, in his 'Essay towards a real character,' has enumerated the aspirated *l* and *r* among the provincial vices of speech, and has allotted literal symbols to them.

The enumeration made under the preceding divisions, includes all the elementary sounds of the English language, which have been noticed by observant authors.

There are three of the subtonics and three of the atonics,—*b, d, g, p, t, and k*, that have eminently an explosive character; the breath bursting out after a complete occlusion.

From their serving peculiar purposes in speech, I have set them in a selected subdivision, and called them Abrupt sounds.

In the beginning of a syllable they produce a sudden opening of the succeeding sound; and at the end they exhibit their final vocule. The office of these abrupt elements, in the art of speaking, will be shown in treating of expression.

The foregoing arrangement of elementary sounds was devised to display their relationships to intonation. For a closer view of this subject, I shall describe particularly the structure and functions of the Tonics. This detail was separated from the general view, in order to avoid distracting the reader's attention from the drift of that classification, by the interesting development which has been deferred to this place.

In illustrating the nature of the radical and vanishing movement, by the tonic *a-le*, it was stated that this element consists of two sorts of sound, and that when uttered with inexpressive effort, the voice rises through the interval of a tone; the radical beginning on 'a,' and the vanish diminishing to a close on 'e.' Now as all the tonic sounds necessarily pass through the radical and vanish, they demand an analysis relatively to that concrete function of pitch.

These seven of the tonic elements,

*a-we, a-rt, a-n, a-le, i-sle, o-ld, ou-r,*

have different sounds for the two extremes of their concrete movement.

The remaining five,

*ee-l, oo-ze, e-rr, e-nd, i-n,*

have each, one unaltered sound throughout their concrete movement.

The tonics are therefore properly divided into Diphthongs and Monothongs.

*A-we* has for its radical, the sound of 'a' in *awe*: and for its vanish, a short and obscure sound of the monothong 'e-rr.'



*A*-rt has for its radical the sound of 'a' in *art* : its vanish like that of the preceding, being the monothong 'e-rr.'

The radical of *a*-n is the sound of 'a' in *an*. Its vanish is the same in degree and sort with the last.

The sound of each of these elements has heretofore been considered as homogeneous throughout : for their vanish being very faint in ordinary utterance, it has escaped perception. But it may be heard by using these elements severally, with earnest interrogation. They will each terminate at a high pitch, in a feeble sound of 'e-rr.'

*A*-le, I have said before, has its radical, with the distinct sound of the monothong *ee*-l for its vanishing movement.

*I*-sle has its radical, followed in like manner by a vanish of the monothong *ee*-l. The diphthongal nature of 'i' has long been known, and the discovery of it is attributed to Wallis the grammarian. It is described by Sheridan and others, as consisting of *a*-we and *ee*-l : the coalescence of the two producing the peculiar sound of 'i.' In this account, it is admitted that the element is peculiar ; I can therefore see no need of reference to *a*-we, in the theory of its causation. A skilful ear will readily perceive that the radical of *i*-sle is a peculiar tonic, and will so report thereon, without having recourse to the absurd supposition that an unheard sound is changed into another audible one.

*O*-ld has its radical in the sound of 'o,' formerly supposed to be homogeneous. Its vanish is the distinctly audible sound of the monothong *oo*-ze.

*Ou*-r has a radical, followed in like manner by a vanish of the monothong *oo*-ze. That the first sound of this diphthongal tonic is not '*a*-we,' but a radical of its own, may easily be proved by a discriminating ear : and a trial with the voice will show, that *a*-we does not unite with *oo*-ze, by that easy gliding transition which is heard in the junction of the true radical of *ou*-r with the same *oo*-ze.

I have been at a loss what to say of that sound which is signified by 'oi' and 'oy,' as in 'voice' and 'boy.' It may be looked upon as diphthongal tonic, consisting of the radical *a*-we and the vanishing monothong *i*-n, when the quantity of the element is short, and *ee*-l when long. But from the habit of the voice, it is difficult to give *a*-we without adding its usual

vanish of *e-rr*; and this makes the compound, a triphthong. If it is taken as a diphthongal tonic, this is the only instance in which the same radical has two different vanishes. And though this reason should not be conclusive against its classification, it suggests an examination of the subject. In case this sound should be considered as a true diphthongal tonic, and analogies seem in favor of it, it would make the number of tonics thirteen, and the whole of the elements thirty-six.

The seven radical sounds with their vanishes, which have been described, include, as far as I can perceive, all the elementary diphthongs of the English language. By the term diphthong, I mean the progress of the voice from one tonic sound to another; forming thus the impulse of one syllable, by a continuous gliding, without a perceptible change of organic effort, in the transition. By the term elementary, as qualifying a diphthong, I mean to point out the inseparable bond of its constituents; the fate of the voice having so decreed the series of the two sounds, that the first or radical can not, in unpremeditated utterance, be given without terminating in the second or vanish.

The remaining five tonics are monothongs, and have one sort of sound for both the radical and vanishing movement. They are

*oo-ze, ee-l, e-rr, e-nd, i-n.*

If the element *ee-l* be deliberately uttered, in the mode of asking a question with earnest surprise, one unvaried sound of *ee-l*, will be heard, rising from the radical outset, to the top of the vanish. This concrete rise in interrogation will be described hereafter, as being the interval of a radical and vanishing octave; but the same homogeneous course of *ee-l* may be heard through the fifth, third, tone and semitone. This mode of displaying the course of the unchanged concrete in *ee-l*, will show an analogous result in the cases of the four other monothongal tonics. Whereas if the diphthongal tonics be uttered with the interrogative intonation, the difference between their radical and vanishing portions will be at once perceptible.

Should the means of direct observation here suggested, not be satisfactory, I would propose another mode of illustrating the nature of the tonics. We learned in the last section, the distinction between the equable concrete of speech, and the

protracted radical and protracted vanish, of song and recitative. Now the use of these protracted forms of intonation will exhibit the structure of the tonic elements. For an attentive ear may perceive, when the diphthongs are *sung* in the last of these forms, that the voice quickly leaves the radical, and dwells in continuation on the different sound of the vanish. The protracted note, in the vanish of the monothongs, will be the same in sound as their radicals. The words of an ordinary melody in slow time, or any church psalm, will afford proof on this point.

Another mode of illustrating the real diphthongal character of seven of the tonics, may be drawn from the phenomena of rhyme. Rhyme is that peculiar relationship in the sound of syllables, which consists in a difference between the first sound of each of the compared syllables, and an identity between all the subsequent sounds, each to each: the agreeable effect of rhyme depending chiefly on the particular relation between the tonic sounds. The first condition is that of identity in the tonics, as: *dame, came*.—The second degree of relationship is made by tonics which have a different radical, but the same vanishing movement, as: *cars, wars*. The third consists of those tonics that differ both in their radicals and vanishes, yet are of nearest resemblance in their sort of sound, as: *good, blood*.

The use of the second kind of rhyme shows the composition of the diphthongal tonics. In the following lines, the correspondence of *oo-ze* with *o-ld*, and of *a-le* with *ee-l* is admitted as canonical in rhyming, from the identity of the vanishes of *a-le* and *o-ld*, respectively with the monothongs *ee-l* and *oo-ze*.

Here Britain's statesmen oft the fall foredoom  
Of foreign tyrants, and of nymphs at home;  
Here thou, great Anna! whom three realms obey,  
Dost sometimes counsel take—and sometimes tea.

The assimilation of the sounds of *a-le* and *ee-l*, by the identity of their vanishes, produces the monotony of the four following lines.



Swift to the Lock a thousand sprites repair,  
 A thousand wings, by turns, blow back the hair;  
 And thrice they twitch'd the diamond in her ear;  
 Thrice she looked back, and thrice the foe drew near.

Besides the differences arising from singleness of sound, and diphthongal combination, the tonics exhibit a variety in *time*, both when uttered separately, and in syllabic association. Two general divisions may be made :

*a-we, a-rt, a-n, a-le, ee-l, i-sle, o-ur, oo-ze*  
 may be called long tonics, and

*e-rr, e-nd, i-n,*

short. It is not to be understood that the latter may not, by designed effort, be made as long as the former : they have their place in this arrangement, from their usual time in English syllables. In the prolongation of *i-n*, it changes nearly, if not entirely, into *ee-l*. When the long tonics are combined with other elements into syllables, their time is of every distinguishable degree, from a momentary impulse, to the longest passionate utterance of an interjection, as : from *o-tt* to *a-we*—from *ou-t* to *h-ow*—from *a-t* to *a-h* !—*a-te* to *h-ay*—*p-ea-t* to *ee-l*—*f-oo-t* to *oo-ze*—*c-a-rt* to *p-a-rdon*—*k-i-te* to *I*.

The time of the short tonics, in combination, has much less variety. But however short any of the tonics may be, they do in their minimum duration still pass through the concrete movement, as will be fairly proved hereafter.

All the elements, except the abrupt atonics *k, p, t*, have a variety in duration. The vocality of the subtonics affords the means of their time, and its prolongation is next in importance to that of the tonics, for the purposes of vivid and graceful expression.

If it is asked, why I have designated the diphthongs as elementary, each of which may be resolved into greater simplicity ; it may be answered, that the diphthongs, though compounded of two successive sounds, are inseparable in utterance : and regarding elements as simple efforts of the voice, these diphthongs may be ranked among them. I can not pronounce the radical of a diphthong without giving also its vanish. The radical may indeed be indefinitely sustained ; but it can be terminated only by a glide through its second sound, which, how-

ever quick or feeble, may still be heard. In the equable concrete of speech, the rapid pronunciation of a diphthong may diminish the audibility of its second sound, but to an attentive ear it will not be altogether lost. And further, not only does the radical of a diphthong demand its own peculiar vanish, but it can not itself be carried through a given interval without sliding into that vanish. For when we attempt to lead the voice through an octave on the diphthong ‘*a-we*’ or ‘*a-le*,’ its radical may be continued up to the seventh of the scale: still the final close on the eighth will unavoidably turn to ‘*e-rr*’ or ‘*ee-l*. A similar change will take place on all smaller intervals, in an endeavour to make monothongs of the diphthongal radicals.

If an elementary character be denied to the diphthongs, by regarding them as separable sounds, it will not increase the number of simple tonics beyond twelve: for the reader may have already remarked that the vanishing movements of the diphthongs consist exclusively of the monothongs.

It follows, from what has been said on the indivisible nature of the diphthongs, that their radicals can not be united with any other vanishes, than those apparently allotted in the instinctive ordination of the voice: and notwithstanding all that has been observed, assumed and transcribed by writers, on the subject of the diphthongal union of the vowels, I believe that the only instances of that union, admitted in the habits of English speech, are those here enumerated. Every attempt to make further combinations produces a voice which wants the smooth transition and singleness of syllabic impulse, that characterizes a diphthong, and which is found with its defined perfection, only in the double sound of the above named seven elementary tonics.

I have enumerated all the diphthongal tonics which are used in the English language. As they are individually produced by joining a monothong to a radical tonic, if I may so call it, and as all the permutations of union are not employed, it is a curious subject of inquiry,—whether it is within the possibility of the vocal organs to make a greater number of diphthongs, by uniting, severally, every monothong with each radical tonic. Now as there are seven radicals and five monothongs, we might upon this scheme have thirty-five diphthongs. But it appears we have only eight (supposing *oi* to be included:)

*a*-we being combinable with two monothongs, and each of the others with one. Other conjunctions may be made; but they have not a fluent transition, like those which already belong to the language and have their literal signs. Would these new associations require a management of voice which is not altogether instinctive, and might therefore call for a practice and skill not yet reached by the English tongue? Have any of these supposed diphthongs been admitted among the alphabetic elements of other nations? And are these unused materials of speech to be classed with those resources in the animal economy, which are to afford their benefits under higher cultivation, and the widening demands of human improvement?

In elucidating this subject of the tonics it is worthy of remark, that we may consider the diphthongs as mere syllables, compounded of a tonic and subtonic. For it is certain that the monothongs, when used as vanishes to the radical tonics, have in some degree the character of subtonics: that is, they lose the fulness of the radical opening which they have, when uttered by themselves. The vanish of *a-le* is very nearly allied to '*y-e*' if not identical with it; and the vanish of *ou-r* bears as near a relation to '*w-o*.' It will be evident too on trial, that if a radical character is given to these vanishes, they will not unite with the previous radical into one impulse of the voice.

It was said, in a former part of this section, that the subtonics may be uttered separately: their own obscure vocalities bearing, respectively, some resemblance to those of the five monothongs. I now add that some syllables are formed exclusively of subtonics. In the words '*bidden*,' '*fickle*,' '*schism*,' '*rhythm*,' '*riven*,' and their congeners, the last syllable is purely subtonic, or a combination of subtonic and atonic. On these final syllables the radical and vanishing movement is performed: and though they exhibit the concrete function, they betray their inferiority in abruptness, force and musical sound, when compared with the more perfect display of these qualities, on the tonics. The reason why words of this construction are necessarily divided into two syllables, will appear in the following section.



## SECTION IV.

*Of the influence of the Concrete Movement, in the production of the various phenomena of Syllables.*

THE foregoing history of elementary sounds and of the radical and vanishing function, will enable us to lay open the doctrine of Syllabication.

What are the operations of the voice that produce the characteristics of syllables?

What determines their length?

Why are syllables limited in length, otherwise than by the term of expiration : and what produces the ordinary length of them, where there is no obstruction to the further continuation of the sound of tonic and subtonic elements?

And, finally, what prescribes the rule which ordains but one accent to a syllable?

I shall endeavour to answer these questions concisely and in their order.

Those portions of voice which, alone or as constituent parts of words, are called syllables, are the effects of the radical and vanishing movement : and I shall aim to show that every syllable, consisting of one or more elementary sounds, derives its character of length and singleness of impulse, from the concrete movement, and from the different properties of tonic, subtonic, and atonic elements. As I can not give the reader vocal exemplification of this subject, the argument contained in the following inferences must be illustrated by his own experimental trials.

If the concrete movement of the voice through a tone or other interval, is the essential function of a syllable, it follows that each of the tonic sounds may by itself make a syllable : since these can not be pronounced singly, without going through the radical and vanishing movement. Now the tonics, either in the form of words or as interjective particles, are often employed as mono-literal syllables.

It follows also from the assumed causation of a syllable, that two tonics can not be united into one vocal impulse. For each having by nature its own radical and vanish, they must produce two syllables. Consistently with this, we find that whenever two elementary tonics are in sequence, they always belong to separate syllables in pronunciation.

If the concrete function of the voice alone constitutes a syllable, it follows that the atonics, from being incapable of that function, can not make a new and distinct impulse when joined with the tonics. The word 'speaks' exhibits the meaning of this inference. For the syllabic function, as I suppose it to be, is here made on the tonic *ee-l*, whilst *s*, *p*, *k* and *s*, add to the time, but do not destroy the monosyllabic character of that word. The sound is not indeed so gliding and equable as on a single tonic, which shows a syllable in its purest form : yet the slight obstruction to the singleness of impulse is very different from the threefold emphatic division heard in the word 'Ohio'—For if this be properly pronounced, that is, if each of the three tonics receive its radical and vanish, it will be impossible to condense them into one impulse or syllable. In answer to the first question, then,—It is the concrete movement of the elementary sounds, or the radical and vanishing function of the voice, which produces the characteristics of those successive impulses of speech called syllables.

Syllables are of different lengths. Is this an arbitrary variation : or is it the unavoidable product of the properties of the elementary sounds?

This question is not asked in reference to prosodial quantities ; nor to those abridgments and prolongations of voice that appropriately mark the force and solemnity of oratorical expression. It regards especially the variation of length in syllables, which is unalterably created by their literal constituents ; for it will be shown that their limits are determined by the arrangement of these.

In order to render this subject perspicuous, let us take a synthetic view of the literal series in words.

Several of the tonics individually form English syllables : and these exhibit the syllabic impulse of the radical and vanish in its most simple condition. But elements can not be compounded, with a view to lengthen a syllable, by the addition

of one tonic to another ; for this would produce a new and separate impulse.

If to the element *a*-le the atonic 'f' be prefixed, the syllable 'fa' will be formed, with the concrete rise on 'a' preceded by the aspiration. If to these the atonic 'c' be subjoined, the word 'face' will be longer than the element 'a;' still the triple compound will be but one syllable, since it can have only one concrete rise. For though these two atonics may be clearly heard, as part of the length of the syllable, yet being incapable of the concrete function, the transition through the given interval is made altogether on 'a,' as if the word consisted of that element alone. The addition of atonics to tonics, is then the first mode of increasing the length of a syllable, without destroying its singleness of impulse.

Further, if to the tonic 'a' the subtonic 'l' be prefixed, the syllable 'la' will be longer than 'a' but will still have but one function of the radical and vanish. For I said formerly, that when a subtonic is uttered before a tonic, the vanish of the subtonic does not occur : its radical continuing on a level line of pitch, till the tonic opens on that line with a more emphatic radical, and immediately carries up the concrete of the syllable. Now in the syllable 'la,' 'l' does begin the impulse with its vocality, and without perceptibly rising, joins the vocality of 'a' which forms the full emphatic radical, and then vanishes on the 'e' of that diphthongal element. If to 'la' the subtonic 'v' be subjoined, the compound 'lave' will be much longer than 'a;' and its syllabic character will still be preserved, by the singleness of its radical and vanishing movement. In the pronunciation of 'lave,' the intonation of 'l' and 'a' will be as before, except that 'a' will not now rise quite so far through the concrete : for a subtonic having all the properties of a vanish, 'v' will in this case fall in with 'a' before it reaches the top of the interval, and thus complete the vanish of the syllable. The junction of subtonic elements to tonics, is therefore a second mode of adding to the length of syllables, without destroying the unity of the radical and vanishing concrete.

Moreover, if the abrupt element 't' be prefixed to 'a' the syllable 'ta,' so formed, will be but a single impulse. If 'g' be subjoined, the word 'tag' will still exhibit only one radi-

cal and vanish. If in this manner two abrupt atonics, are joined with the short tonics, as in 'cut,' 'pet,' 'tik,' they produce the shortest syllables in the language: in which the concrete movement, however short, is still performed. This union of abrupt elements with tonics, is a third mode of preserving the singleness of a syllable, with the variation of its length.

The three different sorts of combination enumerated above, produce their various lengths, in the manner represented by the examples under each head. But none of them can be much extended beyond the instances given, whilst they are restricted to the kind of elements noted in their respective cases.

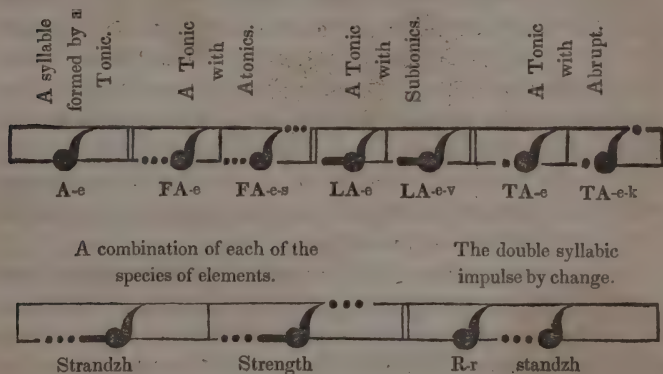
A fourth mode of combining elements is by a union of all the four kinds in one syllable. For the illustration of this, it is necessary to bear in mind, that whenever there is a pause after a subtonic, consequently whenever it is uttered singly or at the end of a syllable, it unavoidably takes on the concrete movement: and that the same condition occurs if it is followed by an atonic; for in this case there is a termination of vocality. If we analyze the words 'strange,' (properly strandzh) and 'strength,' and the imaginary syllable 'sglivzd,' we shall find that but one radical and vanishing movement is performed on each of them: and that the singleness of impulse is made by the peculiar arrangement of all the kinds of elements. They consist of seven sounds, which is the greatest number that the nature of the elements admits of, even with the best contrived mode of combination. The radical and vanish of these syllables are made on 'ange,' 'eng' and 'ivzd,' and the principle of the vocal management of the other elements is analogous in each: for 'r' and 'l' being subtonics respectively before the tonics *a*-le, *e*-nd, and *i*-sle, do not take on the concrete. 'T' being an abrupt atonic, adds nothing to the vocality of 'r,' and the preceding atonic 's' having no concrete function, the three elements 's,' 't' and 'r,' together with 'th' in 'strength,' and the 'g' and 'l' in the imaginary syllable, increase the length of the several words without destroying the unity of their impulses. The constituents in each of the above words may be combined into one syllable, in other series: but in all cases, the atonics must be on the extremes. If it is otherwise, as in the arrangement 'rstange,' the whole can not be pronounced as one syllable. For since the vocality



of 'r,' ceases on account of the subsequent atonic 's,' this 'r' must take on the concrete movement, and thus become a syllable. The reader may remember that it was said, the subtonics are capable of the radical and vanish when uttered separately : and the termination of their sound by an atonic, amounts to this condition.

I have thus endeavoured to show, that the various lengths of syllables depend on the nature of the constituent elements, and the disposition of them, as regards the execution of the radical and vanish.

The following notation may serve to illustrate the preceding account of the structure of syllables. I here represent the movement of a third ; but the mode is the same, in all intervals. The dotted line represents the atonic sound. The thick black line united to the radical denotes the pitch of the subtonic, when it precedes a tonic : and the full black point, with its appendage, signifies the tonic alone, or the tonic in combination with the vanishing subtonic.



In this notation, the atonic sounds are represented by the dotted lines, as if they had a certain place in pitch ; but being mere aspirations, their place is in no appreciable relation to the tonics and subtonics : and I beg that the reader may so understand the notation, where the atonic symbols are used to show the presence of the aspirated voice.

If the principle of syllabication consists in a simple pause of the voice, or any other mode of sound than that which I have insisted on, a syllable might contain an indefinite number of

tonic sounds, combined with such other elements as have no occlusion : and consequently the length of the syllable would be limited only by the time of expiration. But from the influence of the radical and vanish, in the utterance of the common aggregates of elementary sounds, the duration of a syllable is quickly arrested. There are twelve tonics ; fourteen subtonics ; nine atonics ; and six abrupt elements. Twelve of these, the nine atonics and the three abrupt subtonics, being productive of an interruption to the continuity of the syllabic impulse, the mingling of all the elements must give one of these a position in every third or fourth place among the tonics and subtonics, and thereby set a limit to the duration of syllabic sound. Sometimes this interruption produces syllables of two elements only : and it has never, I believe, in the English language, allowed any syllable in use, to extend beyond seven.

The reason why the words 'strange' and 'strength' can not be made longer without more than ordinary effort, is this :—The tonic elements can not be added for this purpose, since each of them always makes either the whole or part of a separate syllable. Nor will these words bear a subtonic at the beginning : for as 's' is an atonic, any subtonic uttered before it must come to a pause, must therefore go through its vanish, and thus produce a separate syllable. An atonic being prefixed to these words would not indeed make a new concrete ; but it would produce a varying effort of hissing and aspiration, which would bear no analogy to the audible and gliding nature of tonic and subtonic syllabication.

In answer then to the question,—why syllables are not continued to the utmost length of an act of expiration, it has been shown that as speech employs all the elements, the abrupt and atonic must necessarily divide the time of one expiration, into different syllabic impulses.

In any number of elementary sounds, let us now suppose the atonic and abrupt to be rejected, and consequently the last mentioned cause of limitation to be removed. Why is it impossible in this case to give indefinite length to a syllable, formed by the union of a tonic with any number of subtonics ?—Or, why is such a syllable otherwise limited, than by the exhaustion of expiration ?

When a tonic precedes a subtonic, in the formation of any

concrete interval, it gives up a portion of its movement to that subtonic, which then carries on and completes the vanish. In this way the radical and vanish may consist of a tonic and one, two, three, or at most four subtonics. But the number can not, in easy pronunciation, be extended beyond these. Thus in the syllable 'strandzh' (strange) the concrete rise begins on 'a,' and continuing through 'n,' 'd' and 'zh,' vanishes on this last. If two more subtonics 'v' and 'm' were subjoined to this word, as in 'strandzhvm,' few speakers could make one pure syllabic impulse of the combination. The reason of this difficulty, or as we may call it, impossibility, will appear in the following remarks.

In the most general use of the voice, the concrete rises through the interval of a tone, and employs therein a certain portion of time. Now though the tone and time may be executed on one tonic combined with several subtonics; yet there is a maximum to the number, utterable by an easy effort of speech. For as each constituent must have a certain duration, to render it cognizable as a variation of pitch, and to ensure a distinct pronunciation, it must consume a portion of the time of the concrete: and it is plain from experience that each constituent does consume so much, that not more than four subtonics, together with the preceding tonic, can in easy utterance be compressed into the time and space of the radical and vanish.

In describing the concrete, we pointed out three modes of this function,—its equable progress, and the prolongation of its radical, and of its vanish. When a combination of tonics and subtonics, greater than can be used for one concrete, is offered for pronunciation, one of two things must occur: either two syllables must be formed by two separate concretes, or some one or more of the numerous constituents must be prolonged on one line of pitch. And though this last mode of utterance would not necessarily produce two syllables, yet by assuming the characteristic *note* of song, it would be very different from the equable effect of the true syllabic concrete.

I have thus endeavoured to show why, in ordinary speech, syllables can not be indefinitely extended when they consist only of tonic and subtonic sounds, and consequently when

there is no obstruction to their continuation, by the interposition of abrupt and atonic elements.

A further consideration of the radical and vanishing movement, will inform us why there is, ordinarily, but one effort of accentual stress on each syllable. I will show hereafter that there are six modes in which the force called Accent can be laid on the concrete. First, by the abrupt explosion of the radical. Secondly, by giving more force to the middle of the concrete. Thirdly, by greater stress on the vanishing portion. Fourthly, by making the whole concrete of the same fulness that naturally belongs to the radical. Fifthly, by magnifying, so to speak, the whole of the concrete ; the proportional forces of the radical and vanish remaining unaltered. Sixthly, by an abrupt stress on the radical, together with increased force on the vanish of the same concrete. The first five of these modes do not alter the singleness of the accentual impression. Something like an exception to the rule of a single accent, seems to exist in the sixth, as will be particularly noticed under the future head of Expression :—but this condition, if an exception at all, is not of common occurrence, and is by no means contemplated here, in looking at the ordinary phenomena of syllabic speech.

From what has been said upon the construction of syllables, the reader will no doubt perceive the causes of their difference in degree, as regards agreeableness of sound, and the gliding continuity of voice. The most eminent on these points are those formed by a single tonic : and although the concrete rise of a diphthong consists of two dissimilar sounds, it is not inferior, in the above named qualities, to the uniform voice of a monothong.

The next condition of the syllable is that formed by an initial tonic, followed by one or two subtonics, as : ‘aim,’ ‘ale,’ ‘arm,’ ‘earn,’ ‘elm,’ ‘orle.’ These have an easy mingling of their constituents ; and their tonic commencement allows an equable concrete movement from the opening to the close of the syllable.

The equable progress is, to a certain degree, impaired in that order of syllables, in which the first sound is a subtonic, as in ‘mains,’ ‘gale,’ ‘warms,’ ‘zearn,’ ‘realm.’ Now since the radical in these cases does not properly begin on the first



element, there is a slight Note or level line of pitch on the subtonic which precedes the tonic.

The next of the syllabic combinations are those which contain each of the three kinds of elements, as 'swarms,' 'strength,' 'thrown,' 'smiles.' Here the atonic sounds are not agreeable. They prevent the equability of the concrete movement; and though they do not destroy the singleness of impulse, they are attended with some hiatus from the changes of position in the organs which produce them.

A few syllables, such as the last of 'little,' are made of sub-tonics and atonics, without the addition of a tonic. They are destitute of force and fulness in the radical opening. They have the nasal kind of vocality, which belongs to the sub-tonics: and it is most remarkable in these syllables, because here it is not covered by the clear laryngeal sound of the tonics.

There are various degrees in the smoothness of the syllabic impulse, from the clear transition of the diphthongal tonics 'a' and 'awe,' to the two concretes of a dissyllable. The words 'flower,' 'higher,' 'boy,' 'voice,' and 'coin,' by a slight variation in effort, may each be uttered either as one or as two syllables. Under the first condition, they seem severally to consist of the union of two tonics in one syllable, which I have said is impossible. If 'flower' is pronounced with the glide of a single impulse, it must be upon the elements, *f*, *l*, *ou*, and *r*, and this exhibits no inconsistency with our proposed doctrine of syllables. If the tonic *e-rr* be sounded before *r*, it will be impossible to avoid the double impulse.

I have considered a syllable as essentially a function of the radical and vanish; and this function is equally productive of the syllabic impulse, in a downward as in an upward direction. I shall show in a future section, when the reader is prepared to understand the explanation, that the unity of the syllable is not destroyed by a movement of the voice, through a continuity of the upward and downward concrete.

The preceding history enables us to explain many causes which must remain hidden to a less searching analysis. Upon our principles of syllabication we may account for the disagreeable effect, produced both in the organs of utterance and on the ear by the use of the indefinite article 'a' before a vowel (or tonic,) and by other similar successions as in 'aorta.'

If we utter the tonics in series, we may in a certain manner pass from one to the other without a break, and without the point of junction being appreciable. In this case, the elements are joined to each other by the mediation of the subtonic ‘y-e.’ But in this continuous mode of utterance, there is an absence of that fulness and abruptness which forms, in its proper place, the character of the tonic radical; since abruptness always requires a previous occlusion of the voice. When a continuation of vocality is made from a subtonic to a tonic, the effect is different: for the subtonics having more or less occlusion, and a vocule more or less distinct, means are afforded, by this occlusion and by the outset of this vocule, for the formation of the abrupt sound of the tonic; and consequently a true radical may be made on a tonic which is continuous with a preceding subtonic. Now when the article ‘a’ is made to coalesce with a tonic at the beginning of a word, an unpleasant perception arises from a want of the radical fulness in that initial tonic. If, however, the article is pronounced separately, in order that the initial tonic may have its full radical opening after the pause, the unpleasant effect will be avoided, though the pronunciation will be necessarily slower. In this way, ‘a,—owl’ and ‘a,—age’ are as unexceptionable, as ‘an owl’ and ‘an age’. The junction of the ‘n’ with a tonic (and the same is true of all the subtonics) produces an agreeable coalescence, from the slight occlusion between them: whilst the union of the vanish of one tonic with the radical of another, creates a disagreeable effort in the organs, and produces an unpleasant impression on the ear. This hiatus, as it is termed, is caused by a deficiency in the fulness of the radical; by an endeavour to supply this deficiency and yet at the same time to pass quickly from tonic to tonic; and by the disappointment of the ear, in not receiving the impression of the element, as it is heard in the same word on other occasions. We can not then in a continuous course of tonic utterance, produce that desirable radical abruptness, which is easily accomplished when the tonics are pronounced with a pause between them, or after those slight natural pauses or occlusions which belong to the subtonics.

The hiatus accompanying the junction of one tonic with another, will be less remarkable when the last receives no accental stress. Thus it is less in ‘a *account*’ than in ‘a *acci-*

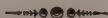
dent:” for in the first example, a full degree of radical abruptness in the tonic ‘a’ is not required.

It is upon the principle of the syllabic agency of the radical and vanish, that the passed time and perfect participle of some verbs ending in ‘ed,’ when contracted into one syllable by rejecting the tonic ‘e,’ change ‘d’ into ‘t,’ as: snatched snatch’t; passed pass’t; stopp’t; check’t. For if the ‘e’ be dropped, the ‘d’ which remains having a vocality, and possessing as a subtonic the power of a concrete movement, it must, when preceded by an abrupt or atonic element, as in the above instances, exhibit a radical and vanish, and consequently must make a syllable, in place of that made on ‘ed;’ which, by the proposition, was to be rejected. But if the abrupt atonic ‘t’ is substituted for ‘d,’ that element may be retained without destroying the singleness of the syllabic impulse.

Those irregular verbs which, by contraction, have their present and past times and perfect participle alike, are generally found to end in ‘t,’ as: beat, hurt, let, left. The economy of utterance or the occasions of poetical measure, producing a contraction of the regular form of ‘beat beated beated,’ which we may suppose to have been the original structure of the verb, the operation of the radical and vanish in syllabication does not allow the contraction to be made by the mere elision of ‘e.’ For upon this elision, ‘beated,’ can be changed to one syllable, as we have seen above, only by substituting the atonic ‘t’ for the subtonic ‘d,’ as in ‘beat’t,’—and this differs so slightly from ‘beat’ that this single word would be used as the inflection of the verb, and as the participle.

I might still further apply the foregoing principles, in the explanation of many apparent anomalies in speech, which have hitherto passed without scrutiny or without satisfactory interpretation. But I have already exceeded my original intention, in planning the subject of this section; and must therefore leave other particulars, to the observation and reflection of the reader. Perhaps I do not exceed the bounds of reasonable anticipation, when I foresee his rising interest in this history of the voice. But all these things, and more too that I shall tell, may be made by him, to seem only like the preface to a full knowledge of this subject,—if he will adopt the mode of inquiry which has thus far assisted me:—if he will become

the spy upon nature, through his own watchfulness, and not draw too much from the precarious source of authority:—if he will turn from those discouraging prospects, presented by the result of every attempt to make knowledge out of notions; and by entering into sober communion with his own senses, lay himself open to the advising of those five ministers of knowledge, appointed by nature for his counseling in all truth.



## SECTION V.

### *Of the Causative Mechanism of the voice,—in relation to its different Qualities.*

A DESCRIPTION of the different sorts of sound of the human voice, without an exemplification by actual utterance, is always insufficient and often unintelligible. With a view to facilitate instruction, it is desirable to discover the mechanical movements of the organs, and the mode of action of the air upon them; that a reference to the conformations and changes of the organs and to the impulses of the air, may enable any one to have a precise perception of the nature of described sounds, by using the known physical means which produce them.

The result of physiological inquiry on this subject is not satisfactory. It has happened unfortunately that most physiologists have been public teachers, appointed to stations of influence, and directed by the rules of their office, to instruct without having the time or ability or disposition to investigate. Their condition has obliged them to compile without choice, to define and arrange without reflection, and to affect an originality which may have been forbidden by the frame of their



minds, or the multiplicity of their duties. From these professorial instructors, the covered movements of the organs of speech, seem to cut off the means of observation ; and whilst they have feigned themselves under obligation to teach what they had never learned, they have endeavoured to elude the difficulty, by framing some of these works of fancy which the craft of mastership long ago devised, for satisfying the cravings of undiscerning youth. The puerile wishes of the scholar have been respectfully regarded by the teacher ; and knowledge under his hands, has frequently been rather a picture of the pupil's anticipations, than the truth, and nothing but the truth of nature.

There are few confirmed opinions among writers, on the mechanism of the voice ; and by the duties of philosophy, we are bound to acknowledge much ignorance on this subject. We know that the voice is made by the passage of air through the larynx and cavities of the mouth and nose. From experiments on the human larynx, and from observations upon the vocal functions of dogs, by exposing the organs in the living animal, it is inferred with great probability, that the production of voice is connected with the vibration of the ligaments of the glottis. We have no precise knowledge of the causes of Pitch ; its formation having been by authors differently attributed—to the contraction of the glottis,—the shortening of its chords,—their altered degrees of tension,—the varying velocity of the current of air through the aperture of the glottis,—the rise and fall of the whole larynx and the consequent variation of length in the vocal avenues, between the glottis and the external limit of the mouth and of the nose,—and finally, to the influence of a union of two or more of these causes. Nor are we acquainted with the mechanisms which respectively produce those varieties of sound called the Natural voice, Whisper, and Falsette. Each of these varieties has received some theoretic explanation ; and their locality has, without much precision, been severally assigned to the chest, throat and head.

These discordant and fictional accounts have been in some measure the consequence of conceiving a resemblance, between the organs of the voice and common instruments of music : and whilst those fluctuations of opinion which never belong to truth, have represented the vocal mechanism to be like that of

mouthed or reeded or stringed instruments, the spirit of these unfounded or still incomplete analogies has been carried to the outrage of all similitude, by comparing the track of the fauces, mouth and nose, to the body of a flute; and by ascribing a want of accuracy in intonation to an inequality of tension between what are called the 'strings of the glottis.' We are too much disposed to measure the resources of nature, by the limited inventions of art. The forms of matter, which jointly with the motion of air, may produce sound, must be innumerable; and there certainly is no great comprehensiveness of inquiry, in that view of the mechanism of the human voice which regards only the functions of those few forms that have received the names of 'musical instruments.'

The illustrations which these analogies are supposed to afford, are no more than resting places for the mind in the perplexed pursuit of truth. The physiologists of antiquity thought they explained the mysteries of the voice when they compared the trachea to a flute; and science reposed from the time of Galen, to that of Dodart and Ferrein in the eighteenth century, on the satisfaction produced by this fancy. The means of illustration have followed the fashion of instruments, and of late years the chords of the æolian harp and the reed of the hautboy, have furnished mechanical pictures of the organs of voice. One can not say positively, that a resemblance of the mechanism of the voice, to some known instrument of music, may not be proved hereafter; but cautious reflection will guard us against surprise on a future discovery, that in most points, the functions of the two cases are totally dissimilar. Before the use of the balloon for the support and progression of men upon the air, no one ever imagined the possibility of his flight, through any other instrumentality than that of wings.

The history of the voice consists of some due experiment and observation, and of inferences from the principles of musical instruments applied without much precision to the human organs. We seem to have been so entirely convinced of the analogy between these cases, and have relied so implicitly on systems constructed upon it, that we have forgotten the importance of unbiased observation. The vanity of fancying knowledge completed, and despair in thinking it unattainable are equally adverse to the efforts of improvement. The pure

and transcendant spirit of Baconian science, directs us by its productive rules, to record all the phenomena of the voice ; and requires us to know resemblances and differences, not to imagine them. There is no doing without the counseling of analogies, in investigating the processes of nature. With peculiar adaptation to a varied purpose, they are the happy instruments of genius, both for hewing out and for finishing truth : but they should never be confounded with the objects, which they are intended merely to shape and to decorate. In the present inquiry, it might be proper to take into consideration all the artificial instruments of sound ; but when a strict use of the senses can not prove a similarity of function between them and the organs of voice, it can be no benefit to retain as parts of a science, those means which have been used in unsuccessful attempts to discover its truth.

When I speak of our ignorance of the mechanical causes of the different kinds of voice and of their pitch, I beg to be clearly understood. To *know* a thing as this phrase is applied in most of the subjects of human inquiry, is to have that opinion of its nature, which authority, analogical argument, and partial observation, prompted by various motives of vanity or interest may create. To *know* in natural philosophy, we must employ our senses and contrive experiments on the subject of inquiry ; and admit no belief of it which may not at any time be illustrated by demonstration. Physiology is too full of the first of these modes of logic : and no branch exhibits it more conspicuously than that of the mechanism of the human voice. One, from the analogy of musical strings, says that Pitch is produced by the varied tension of the chords of the glottis ; without satisfactorily showing in what manner the degrees of tension are correspondent to the degrees of pitch in the human voice. — Another teaches that the vibration of these cords performs the same function as the reed of the hautboy ; without a further explanation of the mode in which this laryngeal reed effects all the degrees of intonation. Whilst a third ascribes the pitch of the falsette to the agency of the base of the tongue, the arch of the fauces, the soft palate and the uvula ; without satisfying the doubt, that these varied and flexible structures have individually or collectively any fixed relationship to the current of respiration, in the production of that pitch.



When therefore we seek to *know* the mechanism of the voice, it should be to *see*, or to be truly told, by *those* who have seen, the whole process of the action of the air on the vocal organs, in the production of the quality, force, pitch, and articulation of speech. This method, and this alone, produces permanent knowledge; and elevates our belief above the condition of vulgar opinion and sectarian dispute. The visibility of most of the parts concerned in Articulation has long since produced among physiologists, some agreement as to its causes. But after all I have been able to see or learn on the subject of Quality and Pitch, I must fairly confess an entire ignorance of the mode of their mechanical production: and the great difference on this point among authors has never impressed me with much respect towards their opinions.

As this section is addressed principally to physiologists, I have omitted a description of the organs of the voice, since it may be found in all the manuals of anatomy: and I can see no use in repeating here an account of structures and actions, when we know not what vocal effect those actions produce. The general statement of our problem is, that—some part or parts of the vocal canal produce all the phenomena of the voice. Now when discovery shall point out the efficient parts and the mode of their action, then it will be the duty of anatomy to describe their internal organization, and motive powers, that the whole may be made a permanent subject of science. Anatomy is truly the foundation of physiological science; but observation of the living functions has, I believe, always thrown the first light upon its various branches. It has been the part of anatomy to confirm or complete our knowledge of them; agreeably to the saying of the Greek philosophy that,—what is first to nature in the work of creation is the last to man in the labour of inquiry. With regard to the mechanism of the voice, we are yet occupied with the perplexities of analysis; when that work shall be finished, we may begin again with muscles, cartilages, ligaments, mucous tissues and the os hyoides, and describe the whole with the synthetic steps of natural causation.

In the meantime, I can not so far follow the example of system-makers and professors, as to furnish an account of the mechanism of the voice, solely because it is desirable and may



be looked for. Aiming in this work to serve truth with my senses, I shall describe what is distinguishable by the ear in the different kinds of voice, together with the visible structure and movement of the organs ; in the hope that by an acknowledgment of our present ignorance, and by future observation and experiment, other inquirers may arrive at the certainty of doctrine, which through a different method of investigation has never yet been reached.

The thirty-five elements of speech may be heard under four different sorts of voice :—the Natural,—the Falsette,—the Whispering,—and that improved quality which I shall presently describe under the name of the ‘Orotund.’

The Natural voice is that which we employ in ordinary speaking. It includes a range of pitch from the lowest utterable sound, up to that point at which the voice is said to break. At this place the natural voice ceases, and the higher parts of the scale are made by a shriller kind called the Falsette. The natural voice is capable of the discrete, the concrete, and the tremulous progression. By the concrete and tremulous movement, the natural may be continued into the falsette, without a perceptible point of union. Thus the concrete rise in vehement interrogation sometimes passes far above the limit of the natural scale, without exhibiting that unpleasant break in the transition to the falsette, which in the discrete scale is remarkable both as to quality of sound, and executive effort, except with persons of great vocal skill. The peculiarity of sound and intonation at this point of the discrete scale, has received the name of ‘false note.’

It has been said, the natural voice is produced by the vibration of the chords of the glottis. This has been inferred from the analogy between the action of the human organ and that of the dog, in which the vibration has been observed by the exposure of the glottis during the cries of the animal,—and from the vibration of those chords, on blowing through the human larynx when removed from the body. The conclusion is therefore probable, but until it is seen in the living function of the part, or proved by other means, it can not be admitted as a portion of exact physiological science.

With regard to the mechanical cause of the Variations of Pitch, in the natural voice, different notions, and they are but

notions, have been proposed by their respective advocates. They have been transiently enumerated above.

In a subject like this, where we know nothing, but where theorists are ready to fix on any thing, it is well to begin the investigation with the logical process of exclusion; by showing what does not produce pitch, in those parts of the vocal apparatus which are visible.

The Pitch of the natural voice does not appear to be at all connected with the function of the mouth and fauces, for it will be seen on examination, that the rise and fall through the scale, may be effected on all the tonic elements, and that during the intonation of each, the position of the tongue and fauces remains unaltered, if we except some slight unsteadiness of the tongue and soft palate, which can have no relation to the definite divisions of pitch.

The sound of *a*-we is made whilst the tongue is about on a level with the lower teeth; the mouth being open for inspection, and all the parts of this vocal avenue having the same positions as in an act of silent respiration. In performing the run of pitch on this element, however, we must have a regard to the change of position which the articulation of its vanish '*e*-rr' produces. The sound of *e*-ve is made by approximating the tongue to the roof of the mouth, leaving between them a narrow passage for the air. Now in one of these instances the track of the mouth and fauces is free; whilst in the other, the tongue almost closes the avenue of the mouth, and must be nearly in contact with the veil of the palate and the arch of the fauces. But in each case the respective positions remain unaltered, throughout the variations of pitch;—and in both cases the pitch is made with equal facility and exactness.

Among the subtonics, the pitch of *n*-g is made whilst the current of air through the mouth is completely obstructed by the contact of the base of the tongue with the soft palate. '*Th*-en,' on the other hand, may be run through the scale, although it is produced by the stream of expiration over the tip of the tongue, when in contact with the upper fore teeth.

It is unnecessary to refer to the visible positions of the mouth and fauces in the production of other elements. The identity of pitch, which will be found under their various mechanisms,

must contribute to the conclusion that I have ventured to draw from the strongest instances which are given above.

Now as with the element *n-g*, pitch is made by the stream of air passing directly from the glottis through the nose, and consequently without coming into contact with the arch of the fauces or the cavity of the mouth, it is necessary to inquire, whether the varieties of pitch, if produced above the glottis at all, are made in the avenue of the nose. But pitch may be made when the air does not pass through the nose. Pitch too is a variable function, whilst the parts within the nose are incapable of motion.

The Falsette is that peculiar voice in which the higher degrees of pitch are made, after the natural voice breaks or outruns its power. The cry, scream, yell and all shrillness are various modes of the falsette. It must not be understood that its compass lies, restrictively, between the point at which the natural scale ends, and the highest practicable note of the voice : for the same kind of falsette sound may be formed, below the usual point of transition between the two voices, when the natural is raised to its highest degree. All the elements except the atonics may be made in falsette ; for there is no quality corresponding to this sort of voice in the higher notes of whisper. I have already observed that the unpleasant effect both of sound and of effort, in the change from natural to falsette intonation, is obviated when the succession is made by the concrete and the tremulous scales.

The striking difference in quality between the natural and the falsette voices, has created the idea of a difference in their respective mechanisms, not only as regards the kind of sound, but likewise its pitch.

It has been supposed that the falsette is produced at the 'upper orifice of the larynx, formed by the summits of the aretynoid cartilages and the epiglottis :'\* and the difficulty of joining the falsette with the natural voice, which is thought to be made by the inferior ligaments of the glottis, is ascribed to the change of mechanism in the transition. On this point I have only to add, that the falsette or a similar voice,

\* See a summary of the discoveries and opinions of M. Dodart, in Rees' Cyclopædia, under the article, Voice.



but without its acuteness, may be brought downward in pitch nearly to the lowest degree of the natural voice ; at least I am able so to reduce it, thus producing what seems to be a unison, or an octave concord of the two voices.\* Now since the natural voice may by cultivation be carried above the point it instinctively reaches, it may perhaps justify a prosecution of the inquiry—whether these voices have a different locality of mechanism : regarding these additions to the range of pitch and the difficulty of acquiring a command over them, as according rather, with the idea of a difference in the mechanical cause of the two voices, than with that of a mere extension of the powers of the same organization.

As we are ignorant of the mechanical cause of the falsette, supposing it to be different from the natural voice, so the cause of its pitch is equally unknown to us. But fiction is ever ready to supply the wants of ignorance : and the peculiarity of the falsette having suggested to physiologists that its mechanism must be different from that of the natural voice, several writers have assumed that the pitch of the former is made *above* the larynx, and by the back parts of the mouth. I do not give the particulars of their theory, because I have been able to perceive no other foundation for it, than that of the idea of a sort of antithesis in causation : since the natural voice, from which the falsette differs so much, is supposed to be made *within* the larynx. But whatever may have been the ground, we have had on this subject a complete system of physiological explanation, when there is scarcely fact enough to warrant a plausible conjecture.

As we are then ignorant of what *is* the cause of the variations of pitch in falsette, we may perhaps lessen the opportunities for supplying the place of ignorance by fiction, in showing what it *is not*.

If the cavity of the mouth is observed during the exercise

\* The quality of this *reduced* falsette, if I may so call it, consisting of an apparent combination of its peculiar sound with that of the natural voice, may, in a manner, be illustrated by the kind of tone that is produced on a flageolet, by singing or rather by what is called 'humming,' during the act of blowing it. A similar sound is made by joining a vocal murmur with the shrill aspiration of whistling. There is however in both of these cases, more of a buzzing vibration than is heard in this reduced or hoarse falsette.



of the falsette on the element *a-we*, very little alteration will be perceived in the positions of the surrounding parts ; except some slight contractile movement in the uvula, as the pitch rises, and when this is strained to its highest degree, an almost total disappearance of the uvula within the veil of the palate. That this contraction of the uvula in the higher notes of falsette is not the sole cause of its pitch ; and that it is not produced by parts of the vocal avenues situated above the glottis, seems conclusive from the following considerations.

The elements 'n' and 'm,' both of which are made by the passage of air from the glottis solely through the nose, can be precisely intonated in the falsette scale, in which case the current of expiration does not strike the soft palate, uvula, sides of the fauces and base of the tongue—those parts of the mouth, by which, it has been supposed, the pitch of this voice is produced.

All the tonic and subtonic elements can be made in the falsette. Now it is contradictory to a law of sound, that the identical quality called falsette, and its pitch, should be made under mechanical forms so varied, that the causative structure of some of the elements, as of '*a-we*' and '*a-n*' give a clear passage to expiration through the mouth, whilst that of others, as of the '*e-ve*' '*l*' and '*r*' nearly obstruct it.

The falsette may be made by inspiration through the nose with the mouth closed ; in which case the air can not come into contact with those parts of the mouth, which have been supposed to constitute the mechanism of falsette. But further, if we inhale through a tube, one end of which reaches beyond the soft palate, the falsette may be carried through its pitch, though the current of air in this case does not impress the soft parts at the back of the mouth, but passes from the tube directly into the glottis. And the same is true of expiration, where the current passes directly from the glottis into the tube, without passing the isthmus of the fauces.

I have at this time a case under professional treatment, in which the tonsils are so enlarged by disease, that their near approach to each other, merely allows space for the uvula to hang touching between them : thus obstructing the passage of air through the mouth, and presenting a structure altogether different from that natural condition, which has been supposed

to be the mechanical cause of the falsette. And yet this individual, who has some little practice in singing, is able to make the falsette intonation.

I have lately examined the case of a female who is destitute of the whole of the soft palate. The passage to the throat being a single arch curving along the edge of the palate bone, instead of the low double arch formed by the depending uvula in the perfect fauces. Adhering to each side of the arch, just above the tonsil, there is a sort of fleshy drop; seemingly formed by the curtain of the soft palate, being divided through the uvula upwards to the palate bone, and each portion being then drawn out of sight on its respective side, except the lateral uvulas, which project in the manner and place above described. This is the natural state. In straining the highest notes of the falsette, the two uvulas, by some peculiar muscularity, make an effort to approach each other, and thereby convert the simi-circular arch into the form of a horse shoe, by drawing inwards each about half an inch along the diameter of the arch. Now in this case the principal part of the apparatus which is said to produce the falsette is wanting; yet this voice and its degrees of pitch are accurately executed by the individual, notwithstanding the deformity.

All the parts that form the back of the mouth are in their nature too moveable under the influence of the muscular orgasm, to be the mechanical cause of so precise a function as that of the variations of pitch. For where any one point of pitch is maintained, the soft palate and its appendage the uvula, may be seen to undergo involuntary movements, which as far as we know, are inoperative upon the voice. I am able to make twenty-four distinct notes with accurate intonation; fifteen of them are natural and nine falsette. Now in running through this compass on the tonic '*a-we*,' in which the articulative mechanism of an open mouth and embedded tongue, allows the isthmus of the fauces to be distinctly seen,—I perceive no alteration of position in the natural notes, except that of the articulative change, when the voice runs into '*e-rr*,' which forms the obscure vanish of the diphthong '*a-we*.' There is indeed an unsteadiness in the positions, but none of that definite gradation in organic changes which is implied in the ascription of the variations of pitch to the motions of the back part of the

mouth. In intonating the falsette, discretely, I perceive some change in the palate, but little or none in the tongue, if the vanish 'e-rr' is avoided. The change in the palate consists of a convulsive action of the uvula, which starts up, if I may so speak, at the radical opening of 'a-we,' and in a moment descends again. This convulsive action is not apparent when the voice ascends by the concrete; though under the use of both scales, the uvula at the highest rise of the falsette is contracted almost to obliteration. That this extreme contraction is not a movement especially productive of the pitch of the falsette, I have endeavoured to show above: but am not able to say whether it arises from some associative muscular action, or from some change of the articulative mechanism in the higher notes of falsette.

These then are the remarks I have to offer, in acknowledging my ignorance of the mechanical cause of the quality and pitch of the falsette voice.

The Whispering voice is the constituent of the atonic elements. All the tonics and greater part of the subtonics may likewise be uttered in this mode of sound. The subtonics—*v, z, w, th-en, zh*, when whispered, are not respectively different from the atonics—*f, s, wh, th-in, sh*. The other subtonics may likewise be heard in aspiration; for the whisper of—*b, d* and *g*, which have been considered by Holder and his followers as identical with the atonics—*p, t*, and *k*, are distinguishable from them, by a slight guttural effort of aspiration preceding their final explosion.

We are not acquainted with the mechanical cause of *whisper*, as distinguished from *vocality*. It has been ascribed to the operation of the current of air on the sides of the glottis whilst its chords are at rest; whereas vocality is said to proceed from the agitation of the air by the vibration of those chords. This however is but an inference upon analogy, and may claim the rights of probability, and no more.

The whispering voice has its variation of pitch, but under circumstances that distinguish its mode of production from that of the natural and the falsette. It has been shown that the intonation of these voices is not connected with those visible alterations of the mouth, tongue and fauces which produce articulation; since the whole compass of the voice may be passed through on each of the tonic and subtonic elements.



But, if I have not been deceived in my observation, the transit through the scale of whisper is made by taking different elements for the successive steps of the movement: that is, each whispered element is in itself incapable of variation in pitch, whilst its true articulation remains unchanged.

For the explanation of this subject, I would designate three modes of the whispering voice. The Articulated, which consists in the pronunciation of the alphabetic elements,—The Whistled, which has the well known shrillness of this function,—and the Sufflated, made by a blowing through the lips, which partakes of the nature of the two former, without having the shrill quality of the one, or the distinct articulation of the other. Now in the Articulated Whisper, if the elements are distinctly pronounced, without running into the Sufflated mode, it will be perceived that the changes of pitch are really made upon changes of the elements. In the order of articulated intonation of the tonics, ‘*oo-ze*’ is the lowest in the scale and ‘*i-f*’ the highest: the succession by the first, third and fifth, through two octaves, being upon the seven following elements.\*

1	3	5	1	3	5	8
<i>oo-ze,</i>	<i>a-we,</i>	<i>a-rt,</i>	<i>e-rr,</i>	<i>e-ll,</i>	<i>a-ll,</i>	<i>i-f.</i>

If this is the real condition of the scale with regard to its mode of progression, for so it appears to me, each intermediate note must consist of sounds that resemble those which lay contiguous to it. Thus when we require a second in the progression, between *oo-ze* and *a-we*, it must partake of the articulation of both these elements. And of the two sounds for the sixth and seventh, between *a-rt* and *e-rr*, one will partake more of the articulation of *a-rt* and the other of *e-rr*. But

\* It is necessary to remark that a delicate ear, and a practical knowledge of the scale are required for measuring this progression of whispered articulation. The extent of the series of elements given in the text being through two octaves, the series must begin on the gravest degree of pitch. In executing the rising order of these elements, I am obliged to take ‘*oo-ze*’ at the very lowest point, at which pure articulation, freed from whistle and sufflation, can be made. This is required in order to bring the highest place of ‘*i-f*’ within the reach of intonation: my voice being just able to compass these two octaves in articulated whisper. As a matter for further investigation upon this subject, it may not be irrelevant to remark here, the coincidence, in my own case, of the number of degrees in the scale of whispered articulation with that of the natural voice: both being about fifteen.



these intermediate sounds do not exist in our language: hence they are not made without careful effort. And thus it is that the intonation of articulated whisper, is rarely executed with precision, except on those points which are numbered in the preceding series, since the familiar elements of speech are employed at those points.

The pitch of the sufflated whisper appears to be made in the same manner as that of the articulated. For as this sufflation is only a kind of subdued whistling, a husky imitation of the whispered elements will be perceived, when we rise through the scale with it; the *oo-ze* being the lowest sound, and *i-f* the highest. This sufflated whisper is employed to form the tune of the Jews-harp; and it is owing to the difficulty in articulating the intermediate and artificial elements, if I may so call them, that persons even of a good musical ear, are rarely able on first trials to hit accurately, more than the third, fifth, and octave on the scale of this simple instrument.

The pitch of whistling is also dependent on the same mechanism; since if in this case as well as in that of sufflation, a thin rod be passed into the corner of the mouth, so as to depress the tongue, the power of ascending the scale will be destroyed. For in the pitch of whistling, there is, however obscure, a quality of sound in the lowest note, resembling the *oo-ze*, and in the highest the *i-f*; and hence the depression of the tongue prevents the articulation of all those tonics which require the elevation of this member towards the roof of the mouth; and these constitute the greater portion of the scale. The shrillness of whistling seems to be made by the aperture in the lips.

The subtonic elements, when whispered, are individually incapable of the variations of pitch: but like the tonics they may have relatively to each other different places in the scale.

The atonics have no variation of pitch in themselves: nor is their relative place in the scale, if they have any, of the least importance in the use of speech.

In order to perceive clearly the distinctions here pointed out, we must, in executing the articulated whisper, be careful to make the elements, as it were, at the back of the mouth, and to avoid falling into either of the two other forms, whose characteristic function lies nearer the lips.

The mode of voice which I am now about to consider, is not

perhaps specifically different from the natural voice; but is rather to be regarded as an eminent degree of fulness, clearness, and smoothness of its quality: and this may be either native or acquired.

The limited analysis and vague history of speech by the ancients, and the further confusion of the subject by commentators upon them, leave us in doubt whether the expression 'os rotundum' used by the Romans, in enumerating the merits of Grecian utterance, referred to the construction of periods, the predominance or position of vowels, or to quality of voice. Whatever may have been the original signification of the phrase, the English term 'roundness of tone,' specifying the kind of voice, seems to have been derived from it.

He who by closely observing the human voice, in its best instances on the stage, has acquired a knowledge of its powers and beauties, may remember how slowly he came to the full perception and relish of them. And he will not deny that they would have earlier attracted his attention, had they been signalized by a proper oratorical name. On the basis of the Latin phrase, I have constructed the term *Orotund*,—to designate both adjectively and substantively, that assemblage of eminent qualities which constitute the highest character of the speaking voice.

By the *Orotund* voice, I mean that natural or improved manner of uttering the elements which exhibits them with a fulness, clearness, strength, smoothness, and a ringing or musical quality, rarely heard in ordinary speech; but which is never found in its highest excellence, except through long and careful cultivation.

By *Fulness* of voice, I mean that grave and hollow volume, which approaches towards hoarseness.

By *Clearness*, a freedom from nasal murmur and aspiration.

By *Strength*, a satisfactory loudness or audibility.

By *Smoothness*, a freedom from all reedy or guttural harshness.

By a *Ring*ing quality of voice,—its distant resemblance to the resonance of certain musical instruments.

I know how difficult it is to make such descriptions definite, without audible illustration. Perhaps the best mode of instruction on this subject, is to excite attention by terms, to give as clearly as possible a detailed explanation of the thing by figu-

rative reference, and to leave its recognition to the subsequent observation of the learner. The same natural relationships that suggested the metaphor to its inventor, will in due time produce with others a ready acquiescence in the aptness of the illustration.\*

The mechanical structure and action which produce the orotund are to me, after much inquiry, unknown. During its utterance, I can perceive some motion and contraction of the back parts of the mouth, as distinguished from the position of those parts under the colloquial voice. But these indications of a cause are so slight and so indefinite, that to me, they do not at present justify more than this general notice. In our ignorance of the mechanism of speech, we are not even able to decide whether the orotund is merely an improved quality of the natural voice, or the product of some additional function. I said above that the falsette or some thing hoarsely like it, may be executed in the lower range of pitch of the natural voice. It might then be suggested for inquiry—whether the cause of the orotund is the same as that of the reduced falsette, or as it may be called the Basso-falsette: for this has somewhat of the full, hollow, and ringing effect, which I have ascribed to the acquired orotund.

Connected with the subject of an improved quality of the singing voice which vocalists call ‘Pure Tone,’ there are a number of terms used to describe the mechanical causes of its different kinds and qualities. Among these, the causations implied by the phrases ‘voce di testa’ and ‘voce di petto,’ or the voices from the head and the chest, must be considered as alto-

\* Reverberations may serve to furnish some idea of two of the qualities of the orotund voice. Thus vaulted ceilings and covered recesses often give a ringing echo; and speaking with the mouth within an empty vessel produces a hollow fulness. One of the best instances I ever heard, of the modification of the human voice into the above named qualities, was from a boy who had sportfully got into a large copper alembic.

It may be worth thinking upon,—whether the brazen vases of the Greek Theatre were not intended to improve the voice in quality, rather than to increase its force, or to return a unison to its pitch. The speaking trumpet affords, though not agreeably, an illustration of the qualities above described: and could the bugle or the organ diapason be made to articulate, it would show the highest measure of that fulness and sonorous effect, which in a reduced proportion constitute the character of the orotund voice.

gether without foundation in physiology : and the notions conveyed by them, must be hung up beside those metaphorical pictures, which with their characteristic obscurity, have been in all ages, substituted for the unattainable delineations of the real processes of nature.

There is a harsh quality of utterance called the Guttural voice, which is produced by a vibratory current of the air, between the sides of the pharynx and the base of the tongue, when apparently brought into contact above the glottis. If then the term 'voice from the throat,' which has been one of the unmeaning or indefinite designations of vocal science, were applied to this guttural quality, it would precisely assign at least some locality to the mechanism.

Though I have not hesitated to acknowledge my ignorance of the mechanism of the orotund, I know that its function wherever performed may yet be subjected to the will. And as it was said above that the best and only pure instances of this voice, are the result of cultivation, I here propose to point out some elementary means by which it may be acquired.

It might be sufficient for a teacher of elocution to exemplify the orotund, and bid the pupil to imitate it. Vocalists in their lessons on Pure Tone do little more. But singing has long been an art ; and its many votaries have rendered the public familiar with its leading principles, and accustomed the ear to the peculiarities of its practice. Whilst elocution seems to be no more than a brutal instinct ; in which some only bleat, bark, mew, winnow and bray a little better than others. In describing, therefore, without the opportunity of illustrating, it becomes necessary to address the pupil, as if he had no principles to help his understanding, nor exemplified sounds to satisfy his ear. The only way in which this purpose can be answered in written instruction, is to make him teach himself, by referring him to those functions of the voice, which are familiar to him both by nature and name. When the scholastic world shall understand the analysis of the speaking voice, and shall apply it to practice, men will learn the good things of elocution from one another, children will catch the proprieties of speech from well taught parents, and many a topic of this work which I have laboured (perhaps in vain) to make at this time perspicuous, may hereafter, from



the unsought enlightening of surrounding knowledge, seem to be perspicuous in itself.

With due attention, we perceive two modes in the act of respiration: the one being a continued stream of air throughout the whole time of expiration: the other consisting in the issue of breath by short iterated jets. The first of these modes is that of ordinary breathing, panting, sighing, groaning, and sneezing. The second is employed in laughter, crying, and speech.\*

By a voluntary power over the muscles of respiration, the breath in speech is dealt out to successive syllables, in such small portions as may be requisite for the time and force of each. In thus guarding against waste, the necessity of frequent inspiration is obviated: and the ability of pausing freely in the course of expiration, between syllables and words, allows a subsequent abrupt opening of the voice, whenever it is required for the purposes of speech.

The act of Coughing may be made either by a series of short abrupt efforts, in expiration; or by one continued impulse which yields up the whole of the breath. Now this last named mode forms one of the means for acquiring the *orotund* voice. This single impulse of coughing is an abrupt utterance of one of the short tonics, followed by a continuation of the mere atonic breathing 'h' till the expiration is exhausted. Let this compound function, consisting of the exploded vocality and subjoined aspiration, be changed to an entire vocality, by continuing the tonic in place of the aspiration. The sound thus produced, will with proper cultivation, make that full and sonorous quality here denominated the *orotund*.

This contrived effort of coughing, when freed from abruptness, is like that voice which accompanies gaping: for this has a hollow and ringing vocality, very different from the colloquial utterance of tonic sounds.

Let this entire vocality of the cough, if it may be thus dis-

\* Laughter and Crying will be particularly noticed hereafter.

Sighing and Groaning are of similar time: one being an atonic or whispered element, the other a tonic vocality.

Sneezing is a continued expiration abruptly begun; and generally producing one of the elements.

I say nothing here of the various modes of inspiration connected with these acts.

tinguished from the natural cough, which is part vocality and part aspiration,—let it I say be practiced sufficiently, and the learner will find not only an increasing facility in executing it, but its clearness and smoothness will be thereby improved. Let the voice be herein exercised by sliding upwards and downwards, through the concrete scale, on each of the tonic elements; drawing out the vocality to the utmost pressure of expiration. Then let trials be made on syllabic combinations.\*

When the learner is able to execute the tonic elements and single syllables in the orotund, he is not therefore qualified to speak in it. Since he will find on attempting to deliver a sentence in the easy flow and time of ordinary discourse, that his natural voice will return. The cause of this will be understood, by his recollecting the distinction between the two modes of expiration. For though he may have a facility in making the orotund with the continuous stream of vocality, he has yet to acquire the art of delivering that voice, by interrupted jets of expiration, such as are used in natural utterance, and which are absolutely essential to easy and agreeable speech. Continued practice however, with a gradual increase of the number of syllables, will in time bring his interrupted expiration of the orotund under the same command as that of common speech.

And although he may at last have acquired the power of uttering any number of successive syllables by interrupted jets of this voice: yet the manner of their succession will be monotonous; there will be a failure in his designs of expression; and an inability to make the proper close at the end of a sentence. Repeated practice will give correctness and facility on these points, and the management of the orotund, for the impressive and elegant purposes of speech, will in time be no more difficult than that of the natural voice.

The method of acquiring the orotund, is similar to our instinctive progress in the use of the natural voice. The cries of infants are made on the continued stream of vocality. It is

\* This process of forcing out the breath to the seeming exhaustion of the lungs, is apt to produce giddiness of the head. Care should therefore be taken, to avoid continuing the exercise of the voice too long in this manner; and to desist, for the time, after that affection comes on.

a long time before they employ the interrupted mode of expiration. The first speech of the child is by an apportionment of a single syllable to a breath. By a preparatory exercise in the interrupted jets of laughter and crying, the habit of perfect speech is acquired. The same kind of monosyllabic breath, that is employed in infant articulation, and in acquiring the orotund, occurs in the debility of extreme age, and in cases of exhaustion from disease: for here the utterance frequently consists of but one, or at most two syllables to an act of expiration. The condition is similar in panting from violent exercise; the voluntary power which governs the interrupted jets of expiration being lost in this case.

The orotund is possessed in various degrees of excellence by actors of eminence. The state of mere animal instinct in which they have been with regard to the uses of the voice, must convince us that they can have no systematic means for improving it. There is, however, one circumstance in theatrical speech, which may undesignedly produce in the course of time, the full volume and sonorous quality of the orotund. I mean the practice of vociferating, which seems to be required, by the extent of the House, and by the poetical rant and bombast of what are called 'stock acting tragedies.' In addition, therefore, to the previously described means for acquiring the orotund, I shall, in a few words, point out a varied mode, suggested by the vehement efforts of dramatic recitation.

Let the reader make an expiration on the interjection 'hah,' in the voice of whisper; using that degree of force which, with some motion of the chest, seems to drive all the air out of it. Now let the whisper in this process be changed to vocality. This vocality will have the hoarse fulness and sonorous quality of the orotund. It is the forcible exertion of this kind of voice which constitutes vociferation; for vociferation is the utmost effort of the natural voice, as the scream or yell is of the falsette. Actors who affect the first rank in their art, have commonly an energy of feeling that prompts them to a degree of force in utterance, which produces the mixture of vocality and aspiration, heard in the interjection 'hah'—and I shall show in a future section, that the junction of a certain degree of aspiration with the tonic elements, is one of the means of earnest and forceful expression. The frequent occurrence of exaggerated

sentiments in the drama, joined to the effort required by the dimensions of a theatre, produces a habit of interjective expiration, which leads the speaker to the attainment of the orotund, if his voice is capable of it.

It must not be supposed that the full hollow and ringing sound of the orotund is always of the same purity. It varies as to its degrees of strength and fulness, and is sometimes slightly infected with aspiration, or nasal murmur, or guttural harshness.

If it should be asked—what advantage is to be gained by the care and labour here enjoined, for acquiring this improved quality of the speaking voice, I answer—*First*, the mere sound is more musical than that of the common voice. In comparison with the full and sonorous character of a fine orotund, there are voices which have as little of the nature of music in them, as the noise of a hammer on a block. This quality is so alluring that it often catches the ear and approbation of those who are quite insensible to impressions from the agency of pause, quantity, and intonation. I have known the single influence of a musical voice create an extensive fame for its possessor, who in more essential points of good reading was even below mediocrity. It is this quality which dignifies the other excellencies of speech. In the female voice it is most obvious and delightful.

*Secondly*. The orotund is fuller in volume than the common voice: and as its smooth musical quality gives a delicate attenuation to the vanishing movement, its fulness with no less appropriate effect, displays the stronger body of the radical.

*Thirdly*. It has a pureness of vocality that gives distinctness to pronunciation. For when completely formed, it is free from the dullness created by nasal murmur or aspiration; the characteristic offensiveness of which is shown by the union of these functions in snoring.

*Fourthly*. It has a greater degree of strength than the common voice. In this respect it partakes of the nature of things which are perfect in their kind. The ear seems filled with its volume and asks for no more of it. There is too, on the part of the speaker himself, that satisfactory sensation which attends the full energizing of a function: for here nature herself seems to acknowledge that he has done his whole duty. Those who



by cultivation of the singing voice have brought its tone to the utmost extent of fulness and purity, will admit the importance of any means which give strength to the organ for the purposes of speech. Compared with the power and facility of an endowed and high-taught vocalist, instinctive efforts in song seem to be not much removed from the imbecility of paralysis.

*Fifthly.* The orotund, from the discipline of cultivation, is more under command than the common voice: and is consequently more efficient and precise in the production of long quantity; in varying the degrees of force; in executing the tremulous scale, and in fulfilling all the other purposes of expressive intonation.

*Sixthly.* It is the only kind of voice appropriate to the master style of epic and dramatic reading. Through it alone the actor consummates the outward sign of the dignity and energy of his conception. The impressive authority and stately elegance of this voice, exceed as measurably, the meaner sounds of ordinary discourse, as the superlative pictures of the poet and the broad wisdom of the sage, respectively transcend the poor originals of life and all their wretched policies. It is the only voice capable of fulfilling the majesty of Shakspeare and Milton.

*Finally,* as the orotund does not destroy the ability to use at will the common voice, it may be imagined how their contrasted employment may add the resource of vocal light and shade, if I may so speak, to the other means of oratorical coloring and design.

The tremulous movement of the voice does not appear to be produced by any of the visible parts of the fauces: though there is a gurgling noise, somewhat resembling it, which proceeds from the vibration of the uvula, when brought into contact with the base of the tongue in the expiration of the elements 'e-ve' and 'e-rr.' I leave it for future observers to ascertain whether the tremulous rise and fall may not be referred to the same organic cause which produces the variations of pitch in the natural and falsette voices.

I have thus endeavoured to set forth what *we do not know* of the mechanism of speech. The subject of the voice is divided into two branches,—Anatomy and Physiology. The first embraces a description of the vocal organs. The second

a history of the functions performed by that organization. The anatomical structure is recorded even to the utmost visible minuteness : whilst the history of those audible functions which it is the design of this work to develop, and which by the strictest meaning of the term constitute the vocal physiology, has in a great measure been disregarded, under a belief that the subject is beyond the power of scrutiny.

In thus overlooking the analysis of quality, force, and pitch of vocal sound, writers have endeavoured to ascertain what parts of the organization produce these several phenomena ; and seem to have almost restricted the name of physiology to their vain and contradictory fancies about these mechanical causations. Hence in the physiology of the audible functions, there is little of that rooted opinion, which in most cultivated sciences, contends with an original inquirer at every step. Whereas the subject of mechanical causation, like all other matters of theory, has become doctrinal and divided ; and the inquirer has here not only to strive at the secrecy of nature, but harder still, has to encounter the obstinacy of sectaries, whose opinions have grown into pride by their unyielding contentions with each other.

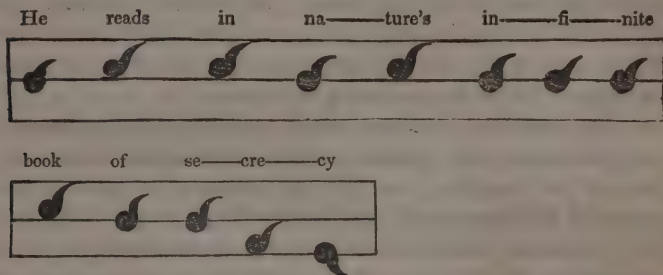
When the reader has finished this volume, he will perceive that in the present section I was somewhat occupied by the notions of men ; whilst in all the rest, I was entirely employed in attempting to delineate the works of nature : A contrast that may well induce one to exclaim,—Happy is he, who desiring to advance the cause of knowledge, comes to a subject which the fictional finger of the schools has never touched.

## SECTION VI.

*Of the Melody of Speech ; together with an inquiry how far the Musical terms Key and Modulation are applicable to it.*

WHEN the nature of the radical and vanishing movement was described, it was regarded individually, or as applied to a single syllable. But as speech consists for the most part, of a series of syllables, on each of which the concrete function of the voice instinctively occurs ; it is necessary to consider the use and relationships of the radical and vanish, in their aggregate application to the successive syllables of discourse.

In plain narrative or description, the concrete utterance of each syllable is made through the interval of a tone ; and the successive concretes have a difference of pitch, relatively to each other. The appropriation of these concretes to syllables, and the manner in which the succession of their pitch is varied, are exemplified in the following notation :



If these lines and the included spaces be supposed, each in proximate order, to denote the difference of a tone in pitch, the successions of the radical points, with their issuing vanish, will show the places of the syllables of the superscribed sentence, in easy and unimpassioned utterance. The perception of the effect of the successions here exemplified, is called the Melody of speech.

A strict definition of the term, melody of speech, embraces the doctrine of pitch, of force, of time, and of pause, and regards likewise higher intervals of the scale than those above exemplified; but as the nature of each of these constituents will be separately described hereafter, the subject of the present section is limited to the development of the principles of pitch when the melody is made exclusively through the interval of a tone.

An accurate perception of the difference of pitch in speech can be obtained only by close observation, and by well devised experiment. The inquirer should be able to rise and descend through the musical scale, on any one of the tonic elements. He should then traverse the octave, both ascending and descending, on any eight successive syllables, selected from common discourse; using a different syllable for each note of the scale. This exercise will in due time enable him to recognize the intervals of a tone, a third, a fifth, and an octave, when the intonation is made on the passing syllables of speech. Being thus prepared, let him try to analyze the sentence in the above example, when uttered in his own natural manner; for I can not suppose him yet able to follow the notation. With this view he should move slowly through the sentence, sounding only the tonic element of each syllable; and giving those elements their shortest abrupt sound; so that the reading, if I may so call it, may resemble the successions of a short cough. This method will make the variations of pitch more distinct than when all the elements are pronounced.

If this contrived utterance should not afford a clear perception whether a given syllable rises or falls a tone, from the place of the preceding one, let him measure the questionable relation of the two sounds, by the rule of the scale, in the following manner. Whilst he pronounces the syllables as if he were reading, let him keep their sounds in notice as parts of the scale. If the second be above the first, he will perceive that the ascent, by those two sounds, forms the two first steps or notes of the rising scale: for by continuing to rise he will find himself completing the scale upon them. If the second be below the first, he will, on the addition of one or more tones below the second, recognize that peculiar effect which be-



longs to the close of the scale, and to the fall of the voice at a period of discourse : for this effect can take place only upon a descent of the voice. In the use of the means here directed, the ear must, with divided attention, be turned at the same time, to the progress of the spoken melody, and to the successions of pitch in the musical scale.

In order to render the system of melody intelligible, we may consider the succession of its sounds as subdivided into that which takes place generally in the sentence, and that which occurs on a short portion at its termination. These divisions, may be otherwise termed, the Current melody, and the melody of the Cadence.

The current melody, or that succession of rise and fall which is made on all the syllables of a sentence, except the three last, exhibits the following phenomena.

In simple phraseology, which conveys no feeling or emphatic sentiment, every syllable consists of the upward radical and vanishing *tone*. The succession of these concrete tones is made with a variation of pitch, in which any two proximate concretes never differ from each other more than the interval of a tone.

To distinguish these two modes of melodial progression by short and referrible terms, let us call the rise of each syllable the Concrete Pitch of melody ; and the place that each syllable assumes above or below the preceding, the Radical Pitch. Thus in the foregoing example of notation, every one of the syllables has the concrete pitch of a tone : the two composing the word 'nature,' differ from each other in their radical pitch, whilst that of the three syllables of 'infinite' is the same.

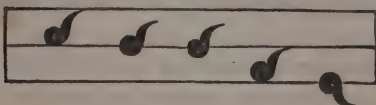
It will be shown hereafter in its proper place, that the melody employed at some of the pauses in discourse, requires a certain succession of radical pitch, for the just representation of sense and expression. But the parts contained within the divisions, made by these pauses, have in general no fixed mode of arrangement : for the effect will be natural and agreeable, if the melody of these parts is made by avoiding a continuation of the same radical pitch, or an alternate rising and falling, or any other progression of remarkable regularity. I offer here

three different notations of the same sentence, in which the above cautions are observed; and in each of which the melody has a natural construction.

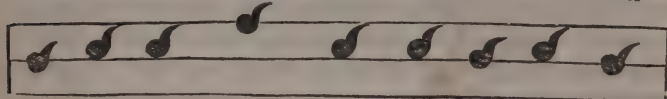
He ne—ver drinks, but Ti—mon's sil—ver



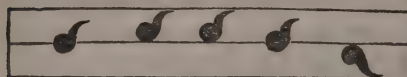
treads up—on his lip.



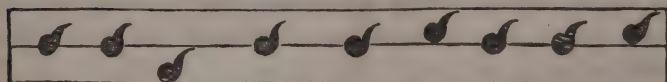
He ne—ver drinks, but Ti—mon's sil—ver



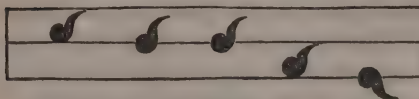
treads up—on his lip.



He ne—ver drinks, but Ti—mon's sil—ver



treads up—on his lip.



There are other modes in which an agreeable melody might be framed for this sentence, on the principles of the varied succession of radical pitch here delineated. But however varied the succession, its forms are all reducible to a limited num-

ber of aggregates of the concrete tones ; which may be called the Phrases of melody, and described thus :

When two or more concretes occur successively on the same place of radical pitch, it may be called the phrase of the Monotone.

When the radical of a concrete is above or below that of a preceding one, the phrases may be termed respectively, the Rising and Falling Ditone.

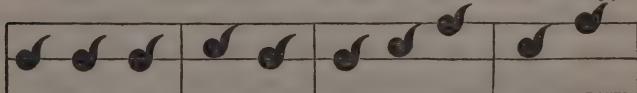
When the radicals of three concretes successively ascend—the Rising Tritone : when they descend, the Falling Tritone.

When there is a train of three or more, alternately a tone above and below each other, it may be called an Alternation or the Alternate phrase.

When three concretes gradually descend in their radical pitch, at the close of a sentence, the phrase may be called the Triad of the Cadence. This is indeed a falling tritone, but since the vanish of the lowest radical in the tritone of the cadence always descends, as I shall show presently, I have thought proper to contradistinguish it by the term Triad.

The form of these phrases is pointed out on the notation of the following lines ; where the current is constructed in a manner not unsuitable to the simple narrative of the couplet : though here, as in some other instances of this essay, the melody is made with a view to illustrate description, rather than to furnish examples of appropriate elocution.

That quar—ter    most    the    skil—ful Greeks    an—noy ;



Monotone.

Falling Ditone.

Rising Tritone.

Rising Ditone.

Where you wild    fig    trees join the    walls of Troy.



Falling Tritone.

Alternation.

Triad of the Cadence.

I have not been able to discover that the melody of plain

narrative or description is resolvable into more than these seven phrases. It would seem to be part of the ordination of the diatonic melody, that there should not be a rise or fall, of any great extent, by proximate degrees. I have limited it to the tritone, in both directions, because it appears to me that a further progression is not agreeable. Whether the propriety of excluding phrases of more than three constituents from diatonic speech, might be grounded on the perception, that the effect of such phrases somewhat resembles that of song, particularly in ascending, whereby the semitone is traversed,—I leave to be determined by others; hoping, in the spirit of true philosophy, that until this point is ascertained, there will be no party divisions or idle wrangling about it.

The three examples given in a preceding page, of the varied current melody of the same sentence, and the statement that even in that short sentence, the phrases might be further agreeably diversified, enable us to understand why an accomplished speaker never offends the ear, by a monotonous continuation of the same radical pitch, or by formal returns of similar progressions. For notwithstanding the pitch is necessarily limited to the variety afforded by the rise and fall of a single tone, yet the different phrases of melody, and their practicable changes, furnish sequences of dissimilar passages, quite sufficient to prevent a recognition of identity in the succession. The ear of a skilful speaker is always on the watch against the faults of monotony, from closely repeated phrases: and there are enough variable elements to afford an easy exemption from them. The principle that governs the construction of the successions of pitch in the melody of speech, is similar to that which directs the arrangement of varied accent, and quantity, in the rythmus of harmonious prose. Excellence in each is the work of a delicate and discerning ear: and its habitual and almost involuntary judgment is not less effective in one instance, by securing the beauties of a varied intonation, than in the other, by rejecting the prosodial measures of acknowledged verse.

The melody of speech is made by movements of the voice, partly in the concrete and partly in the discrete scale. The radical and vanish of each syllable is strictly concrete. The



transition from one syllable to another partakes in some instances of the nature of a concrete junction. Thus, in the first diagram of this section, the vanish of the syllable 'he' rises through the interval of a tone. The radical of 'reads' begins on the place at which the preceding vanish ends: for though the fulness of the radical sound broadly distinguishes it from the fine termination of the antecedent vanish, and notwithstanding there is a momentary interruption of the line of sound, yet there is an appearance of one kind of continuity between them. The transition of the melody from the syllable 'in' to 'na' is by the discrete scale; for the radical of 'na' begins a whole tone below the radical of 'in,' and the change from the vanish of 'in' to the radical of 'na' is here made without the downward continuity of the concrete scale. In a general view of this subject, it may be stated, that the constituents of the phrases of the rising ditone and tritone are joined by the imperfect kind of concrete spoken of above. In the monotone and the falling phrases the transition is made by the discrete scale. It will be readily acknowledged that the changes of pitch after a cadence or full stop, must be by the discrete scale.

If the foregoing description of the successions of pitch in plain narrative, is correct, we may, upon strict etymology, call the sum of those successions the Diatonic melody of speech. For in the first place, the vanish of each separate concrete rises through the space of a tone; and secondly, the changes of radical pitch are made through the same interval.

These two functions, the first having the peculiar characteristic of the equable rise, are the material points that distinguish the melody of speech from that of song.

There are two kinds of succession in song: the first by conjoint degrees, or the change of the note from one place on the scale, to another immediately above or below it; the second by skips as they are called, or by transitions from a given place, to any other except the proximate.

The melody of speech does employ both these modes of succession: but that by skips is of more rare occurrence than in song.

In treating hereafter of the nature of emphasis, and of interrogative sentences, the occasions and manner of using these wider changes of radical pitch will be shown. The melody of

simple narrative or inexpressive speech, now before us, always moves by conjoint degrees.

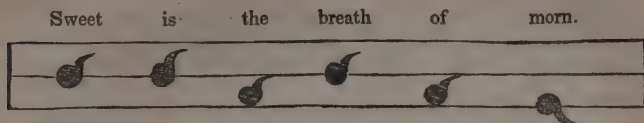
I proceed to analyze the intonation, applied to the final syllables of a sentence ; and which, from its position and peculiar nature, I have contradistinguished as the melody of the Cadence. If the eight notes of the musical diatonic scale be uttered, both ascending and descending, by a repetition of the word ‘cordova,’ the appropriation of syllables will be thus : cor-do-va cor-do-va cor-do : and descending, cor-do cor-do-va cor-do-va. By thus *sol-faing*, if I may so speak, on these syllables, the last repetition of the word in the descent, is allotted to the three lower notes of the scale : the final syllable making a full close on its key-note. In this experiment, I have supposed the intonation to be made by the note of song ; as it would certainly be so made, by a person familiar with the scale. If, whilst descending, these three notes of song be changed to the equable concretes of speech, the effect on the ear will be identical with that of the same word, at a full period of discourse. From this and other trials it may be learned, that the melody of the cadence is always made on the three closing notes of the downward scale.

But the most remarkable effect of the cadence lies in another point. I have represented all the radical sounds of the current melody as terminating in a rising vanish ; but we shall have occasion to see hereafter that the purposes of variety and expression, often require the use of a downward concrete. Now one purpose of a contrary movement is, to bring the current of the voice to a close ; and with this intention, the last constituent or lowest concrete of the cadence is made by a feeble downward vanish of a tone. It is this course of the concrete, which is here so easily distinguishable from the rising vanish, that assists in producing the repose at the end of a sentence : and that constitutes, in connection with the series of three descending radicals, the essential characteristic of the cadence.

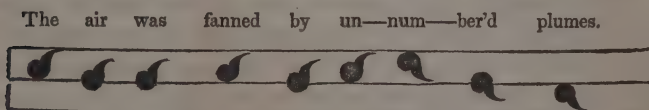
It was stated above, that each syllable of the current melody has a radical and vanishing tone appropriated to it. The parts of the cadence are not so apportioned. Let us, for the sake of reference, designate the constituents of the cadence by the names of their numeral positions.

In the First form of the cadence, the first, second and third

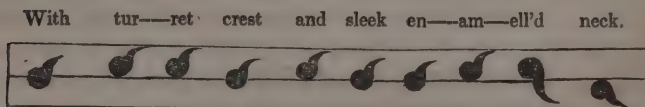
constituent each has a corresponding syllable, as in the following notation :



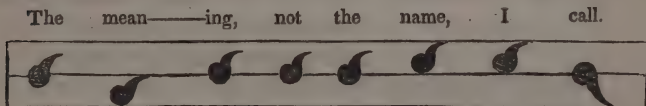
The Second form has a similar appropriation of concretes to syllables ; with a downward vanish on each constituent, as :



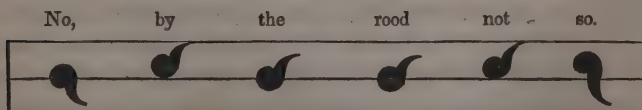
In the Third form, the first and second, or a concrete that occupies the space of the first and second, is allotted to a single syllable, as :



In the Fourth form, the second and third coalesce on one syllable, as :

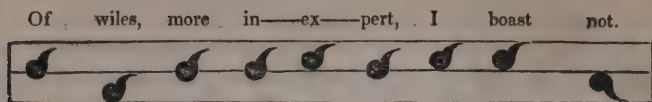


In the Fifth, the three constituents are appropriated to one long syllable, as :



In the Sixth form, which should properly be called a false

cadence, the second constituent is omitted, as in the following notation :



This takes place when the ultimate and penultimate syllables of a sentence are each so short, that giving either the length of two conjoined concretes, would deform pronunciation.

In this example, the proper triad should be made by a successive descent of three tones on the words 'I boast not.' If from unskilful management of the voice, a reader should neglect to set the syllable 'boast' with the radical pitch of a tone below 'I,' he will be unable to complete the cadence, by the downward prolongation of the short syllable 'not' through the interval of two tones, as is done on a long syllable, in the fourth form of the cadence. But a full close can not be made without the third constituent, or an extension of the second in a downward vanish through its place : and as the syllable 'not,' on account of its short time, is incapable of this last condition, the second constituent must be omitted, and a defective cadence made by a skip to the last place of the triad.

From this analysis of the cadence, we have learned that its construction involves the consideration of the time of syllables. The first or tripartite form may be used under any condition of quantity ; but if the three, or even the two last syllables should be short, and not admit of prolongation, it is the only applicable mode. The same remark may be made upon the second form. When the penultimate is long, the third form may be used ; and the fourth and fifth each requires a long quantity in the final syllable.

Of the six described forms of the cadence, all except the last make natural and agreeable closes ; but the first and second, which proceed by an equal number of concretes and syllables are of the easiest execution. The third, fourth and fifth, which conjoin two and three concretes respectively on a single syllable, require a facility in the management of quantity, rarely possessed by common readers. Skill in commanding the time of utterance, enables an accomplished reader to



perform with equal ease and elegance, these four varieties of cadence ; and to give a faultless close, however unexpectedly he may meet with a period in discourse : whilst the ordinary reader frequently fails in his final melody, from being limited to the use of the tripartite cadence. For should his current melody be so continued that a monotone or rising ditone reaches to the penultimate syllable, his cadence will necessarily be awkward or false. The last described form of the cadence, which is not uncommon with the mass of speakers, is strictly forbidden by the rule of a good composition in melody.

The fifth form of the cadence, which is made restrictively upon the last syllable, is distinguished by a peculiarity of function. It appears that the voice does pass downward through nearly the same extent of pitch, as when the cadence is made in the first or tripartite mode : but by this continuous descent the radicals of the second and third constituents are lost. Now it is the fulness of the radical which draws the attention of the ear to the changes of pitch in the current melody ; and which conspicuously marks the descent of the triad at the close. The omission therefore of the radicals of the second and third concretes, lessens the impressiveness of the cadence, and suggests a twofold distinction as regards its effect on the ear. When made, as in the fifth form, by one downward concrete on the last syllable, it may be called the Feeble cadence : and the Full cadence, when the proper radicals of the other constituents are employed. The full cadence is delineated in the first and second forms noted above. When the reader can follow the notation, he will perceive a difference between the effect of these and that of the fifth : he will admit too that the second of the tripartite forms produces a more satisfactory feeling of repose.

In the representations of the cadence, it appears, by measuring to the extreme of the downward vanish of the last constituent, that all the forms except the fifth, embrace the interval of a fourth. And though I have marked this last form nominally as a third, yet the feeble cadence may be made by an extension of the concrete downward to a fourth, or fifth. Nor do I pretend to assert, that the downward concrete of the last constituent of the other forms, may not, on occasion, reach beyond the *tone* which is here allotted to it. I have assumed the interval of the third as the characteristic of the feeble cadence,

because it is the smallest downward interval which has, in its place, the effect of a close. The nature of this cadence is such, that the ear allows a speaker either to pause or to proceed upon it.

The proper construction of the cadence is of the first importance in the melody of speech. The triad, by possessing the peculiar characteristic of a close, and occurring more rarely than the other phrases, does more emphatically affect the ear; whilst its position at the end of a sentence, subjects it to a critical examination, in the leisure of the consequent pause. It is well known to those who have observed learners, that the proper management of the descent of the voice in reading, is acquired with difficulty, and often not until long after the current melody is practicable without any obvious error. I have known offensive deviations from the true rule of the cadence, committed by actors of long practice and considerable skill, who would have guarded their utterance against the alleged faults, if their studies, instead of being compiled from imitation, had been directed by those principles, which well observed nature informs us should govern the high endeavours of speech.

In the first section of this essay, I endeavoured to explain the meaning of the word key, as significative of a certain arrangement of the elements of the musical scale; and I now proceed to inquire with what propriety the term is applied to the melodical ranges of the speaking voice.

The term key, as a generic appellation, means the proper succession of tones and semitones in the diatonic scale. It includes several species of a similar order of successions, carried on from each of the several places of the scale, as the beginning of those similar orders. It was shown that there are twelve keys, founded on the semitonic divisions: within each of which, an air or melody may be restrictively performed; with the regulated means, however, of conducting that melody from one to another through the whole twelve. But an agreeable melody may likewise be made upon a progression of the scale in which the places of the semitones differ from those of the progression, described in the first section. This gives rise to two different modes of the diatonic scale. In one a semitone lies between the third and fourth notes, and between the seventh

and the octave, as taught formerly; constituting the kind of succession called the Major scale or mode. In the other a semitone lies between the second and third notes, and the fifth and sixth in descending the scale, and between the second and third, and the seventh and eighth in ascending; forming the succession of the Minor mode. Now as there are twelve points of the scale from which a diatonic series may be arranged, so there may be twenty-four keys: twelve constructed by the Major mode and twelve by the Minor. A melody formed on the series of the latter has a plaintive expression, arising from the peculiar position of the semitones. But we shall see hereafter that the plaintiveness of speech is produced by an entirely different method of intonation.

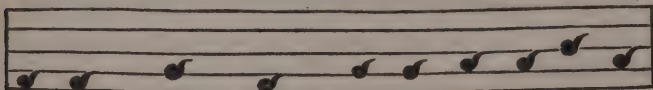
The melody of Music, whether in the major or the minor scale, is made by progressions, both of skips and conjoint degrees, through the series of five tones and two semitones in any given key; and the song or movement, so constructed, is terminated with entire satisfaction to the ear, when brought to a close on the first point of the series, which is called the key note.

The melody of plain narrative or unimpassioned Speech is made by progressions of conjoint degrees only; and its satisfactory close at a period of discourse, is effected by a descent of its radical pitch through three conjoint degrees, with a downward concrete from the last. The scale of the speaking voice has no interspersed semitones; nor is it limited, like that of music, to a peculiar arrangement of seven constituent intervals. If we suppose a person to possess the ability of speaking distinctly through a compass of ten diatonic degrees, included between the lowest pitch of articulate utterance and the highest point of the natural voice, the melody may, by the use of proper phrases, be carried through any wandering course of ascent and descent, within these boundaries. Let the speaker take the first syllable of a sentence, on the first place of this supposed range. A ditone will raise the melody to the second, and an additional concrete, on that second place, will make the phrase of the monotone. From this, a ditone will lead him upwards to the third place; and in like manner ascending, the melody may be carried to the tenth. Now from this utmost elevation, a falling ditone will bring him to the ninth: a mono-

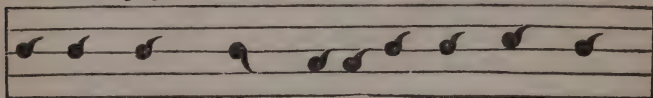
tone on this will prepare the voice for another ditone-descent to the eighth. Having by a similar progress reached the third place, the triad of the cadence, or a downward tritone with the falling concrete of its final constituent, will close the melody on the first.

In this scheme, I have conducted the melody formally up and down, in order to elucidate the means of changing the pitch, without the forbidden movement of several directly successive rising or falling concretes. But it is due to remark that the rising tritone may also be used in ascending; that the progress may be varied by using, at will, a longer monotone, and by deferring the rise or fall, through the occasional employment of a phrase of contrary movement. It is by avoiding an ascent and descent of more than three concretes in succession, that the desirable changes through acuteness and gravity in speech, may be effected in an easy and agreeable manner: for the beauty of melody consists, not only in skilfully varying the order of phrases, as they move onwards, but likewise in correctly managing the rise and fall through the whole compass of pitch. The following notation shows the progress of the voice, through a compass of nine diatonic degrees: the rule of the rise and fall being observed, and the melody being therein agreeably diversified.

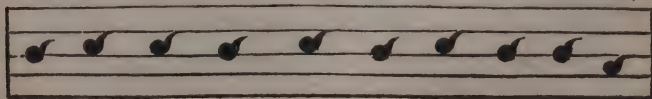
If thou dost slan—der her and tor—ture me,



Ne—ver pray more: a—ban—don all re—morse;

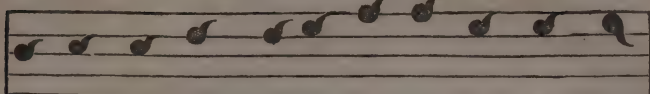


On hor—ror's head hor—rors ac—cu—mu—late;

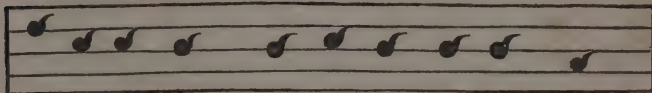




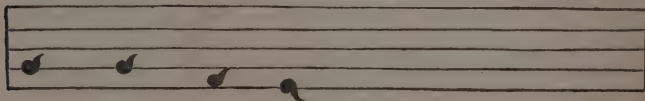
Do deeds to make Hea-ven weep, all earth a-mazed:



For no-thing canst thou to dam--na--tion add,



Great—er than that.



The above notation is designed to exemplify exclusively the means for moving through the compass of the voice. If it were the place here to speak of the emphatic expression of this forcible passage, other modes of both the radical and concrete pitch would be used and explained. These points will be considered hereafter. At the two colon pauses, which in correct reading will not bear a full close, I have set the less conspicuous interruption of the feeble cadence.

From the foregoing account of the musical and speaking scales, it may be learned that though their respective constituent intervals and melodical progressions differ from each other, yet with reference to the philosophic sense of the word key, there is some discoverable, yet the slightest, similarity between them. For since in speech, the descent of three degrees of radical pitch with a downward vanish at the last, always produces a cadence, or effects something like the consummation of a key note in music,—it follows that in a voice, with a compass of ten diatonic degrees, as above supposed, every degree, except the two highest, may be the place of what we will here call a key note of speech: and consequently, that this voice might be said to have eight keys. But there is a difficulty in the specification of the keys of spoken melody, which can not be obviated. When a musical melody is said to be in a

particular key, the expression designates exactly the position of its key-note. But the melody of speech can not be said, with precision, to be in any one key, except the assertion is made of the monotone, since the constituents of this phrase alone have the same key-note. When a cadence is made on any of the other phrases, the triad which descends to a close from one of its constituents, must differ from the triad descending from another.

Such being the fruitless purpose of attempting to designate the key of a single phrase, how much more indefinitely must a particular key be affirmed of a current melody, composed of a continually varying succession of phrases. Definitiveness of key may be affirmed of the cadence, because the succession of its radicals, and the place of its closing concrete, are unalterably fixed. Looking on the triad as determining the key, a particular key may be appropriated to each degree of the vocal compass; and consequently the key of a current melody must perpetually change. If therefore any reference is made to the key in speech, the proper designation should be, by the plural term, keys of the melody.

The peculiar structure of the musical scale; the necessity for rules to govern the changes from one key to another; the purposes of Concerting and of harmonical composition, led to the definite nomenclature and arrangement of musical keys. But should the doctrine of key be at all kept in view, in the art of speaking, the purely diatonic structure of the scale, and, if I dare so compound terms, the strictly solo-vocal office of speech, perhaps call for no nearer precision than a classification into the upper, middle and lower keys of the voice.

From this view of the speaking voice, it may be understood, why in the notation of its melody I have used only the staff of the musical tablature, without reference to its cliffs or its signatures. Cliffs are used in music for the purposes of Concerting; by determining with precision the proper places of pitch for several voices or instruments, when moving in accompaniment. They are therefore useless to the singleness of speech. The melody of speech being altogether diatonic, has no rule for constructing keys, arising out of the fixed places of the semitones, as in the musical scale. Consequently

there is no need of the prefixed signatures of flats and sharps : the naked lines and spaces of the staff, denoting the extent and relationships of pitch, afford sufficient means for illustrating the intonation of speech.

The term modulation is used, in music, to signify the transitions of melody and of harmonic composition, from one key to another. The question of the propriety of this term, as significative of analogous changes in the melody of speech, is involved in the question of the propriety of the application of the musical term key to the mere variations of pitch in the speaking voice : and we have seen the almost universal difference between the regular system of keys in music, and the melodial method of speech.

The preceding remarks, on the musical and speaking scales, were intended to exhibit the relationships between their respective functions : but it appears from comparison, that there is no systematic analogy to justify the transfer of the terms key and modulation from music to speech. The transfer was, however, long ago made, and the terms are still continued under a total ignorance of the nature of the speaking scale. When the truth of the analysis, set forth in this section, shall be admitted, it will be obligatory on all those who take delight in accuracy of knowledge, to distinguish, by appropriate names, those ideas which negligence will have suffered to pass as identical. If the musical terms key and modulation had not received an unmeaning admission into the nomenclature of the speaking voice, the description of its melody would not, in these last pages, have been complicated with the record of the waste work of investigation, which the inquirer loves to expunge and forget, after he has made out the simple story of truth. And had the hitherto untried subject of melody been happily exculpated from the prejudice and false witnessing of its adopted nomenclature, the unargued and unbiassed history of its changes would have been given thus :—

The melody of the speaking voice, may be led, ascending and descending, through its whole compass, by a certain mode of diatonic succession : and may be brought to the satisfactory close, heard at a full period of discourse, by the descent of radical pitch through three conjoint degrees with a final downward concrete, from any point within the compass.

If I have not here followed the preferred brevity, nor omitted the detail which produced the conclusion that the doctrine of key and modulation is hardly applicable to speech ; it was because I certainly anticipated the inquiries which the habit of nomenclature would suggest ; and because I chose, perhaps advantageously, to introduce, into the recorded investigation, some further or varied views upon the melody of speech.

In reviewing the subject just closed, I fear the described phenomena of sound, may not be immediately recognised, nor the system of their combination definitely comprehended. These defaults may proceed not only from the inaptitude of the mind to embrace newly offered subjects of knowledge, but likewise from the connected system of such subjects being dimly arrayed before the very sight which was able to discover their insulated truths. The art of observation is but a matter of apprenticeship and practice ; and it is the time of employ no less than the mode of handling, that produces the high excellence of a master. Thoughts which are not impressed by the deep sealing of time, nor familiarized by the near acquaintance of habit, are feeble or deluding agents in the arduous task of comparison and arrangement : for it will be found that the author who begins or who renovates a science, rarely adds the clearest economy of system to his work. To look widely, yet closely, is the paradox of the powers of heaven : and he who can span the broad compass of a science, whilst he touches its divisions and points, is partially raised above the bounded prospects of humanity, by this humble tendency towards omniscience. To him is due that rich compliment by the sagacious Greek ; who knowing upon what transcendent faculty to affix the crown of intellectual glory, declared, that—he who can arrange and define well, might be fit company for the Gods.



## SECTION VII.

*Of the Expression of Speech.*

IN the preceding section I pointed out the mode of utterance in plain narrative and description : comprehending under these terms that portion of discourse, which conveys the mere thoughts of the speaker, exclusively of those sentiments or feelings which require a different form of melody and a higher coloring of intonation. Schoolmen make a distinction between thoughts and feelings, and common usage has adopted their language. This is not the place for controversy on this point : nor is it necessary to inquire, deliberately, whether the above distinction refers to the essential nature of the things, or to their degrees. Some whose powers of analysis enable them to see beyond the common reach, may be disposed to adopt the system that supposes thoughts and feelings to be various degrees of intensity in ideas : since that function which may be noted as a mere thought in one, has in another, from its urgency, and without apparent specific difference, the bright hue of a feeling ; and since in the same person at different times, like circumstances produce, according to the varied susceptibility of excitement, the mental condition of either a feeling or a thought. Perhaps it might not be a difficult or tedious task, to show that these functions of the mind have many accidents in common ; and that no definite line of demarkation can be drawn between them. However inseparably involved these accidents may be, at their points of affinity, they are in their more remote relationships, either in kind or degree distinguishably different. The effect of the voice in conveying these manifest peculiarities of sentiment or feeling, is called, in the language of Elocution, the Expression of speech.

The classifications of science were instituted to assist the memory and imagination ; but while they fulfil the purpose

of communicating and preserving knowledge, they unfortunately produce the undesigned hindrance of its alteration or advancement, by their vain assumption of its completion. The numberless revolutions in scientific arrangements are full of admonitions : yet we forget how often the fictitious affinities and the distinctions of system, have on the one hand presumptuously united the real divisions of nature, and on the other broken the beautiful connexion of the circle of truth.

In submission to common phraseology and to the necessities of instruction, I have, in this essay, separated the history of that part, which, for the want of a better term, was called the simple narrative of speech, from that which treats of its expressive signs ; with the hope that future observation may determine their real relationships, by a full development of the nature of the mind and the voice. For I can as well suppose all those works of usefulness are already accomplished, which are foretold by the scope of human faculties, as that the arts which employ taste, have yielded up all the accuracy of their principles, and their sources of enjoyment. Let us leave the seventh day of rest, to the holiday rejoicing of patriots and politicians, who look upon their copied creations, and cunning schemes for human misery, and pronounce them original and finished and good. Let them build strongly around the perfection of their Chartas and Constitutions. Let them guard the ark of a forefather's wisdom, and proclaim its holiness to the people, for the safety, honor and emolument of the keeper. The real creators of Knowledge have never yet found, and perhaps never will find, their day of rest : and the proud forefathers of all the great works of usefulness and of glory, are, by means of that same magic which raised their own extraordinary creations, transmuted to corrigible children in the eye of the advancing labour of a later age.

It has been alleged of the expression of speech, that the discrimination of its modes is beyond the ability of the human ear. If the term human ear is sarcastically used for that fruitlessly busy and slavish organ, which has so long listened for the clear voice of nature, amid the conflicting tumult of opinion and authority, we must admit the truth of the assertion. But it is not true of the keen, industrious, and independent exercise of the senses : nor can it be affirmed, without profanity, of that

supreme power of observation which was deputed at creation, for the effective gathering of truth, and the progressive improvement of mankind.

Our conquests in knowledge must be the joint achievement of numbers and time. Leaving then to futurity the completion of my design, I looked around for present assistance : and having often, with more need than hope, consulted the thoughts of others, on the possibility of delineating the signs of expression, I generally received some query like this :—Is it possible to recognize and measure all those delicate variations of sound, which have passed so long without detection, and which seem scarcely more amenable to sense than the atoms of air on which they are made?—It is possible to do all this : and if we can not find a way for this victory over nature, ‘let us,’—with the maxim, and in the contriving spirit and resolution of the great Carthagenian Captain,——‘let us make one.’

It will not be denied, that the sounds constituting expression may be distinctly heard, and that there is no danger of mistaking the sentiments which dictate them. No :—it is the measurable nature and commingling variety of these sounds that can not be distinguished. I leave it to those who make this objection, to reflect on the truism, that there is nothing in the nature of sound but audibility : and, as our feelings are so readily recognized in its varieties, to ask themselves whether a distinct measurement is not implied in that recognition. The truth is, the delicate sounds of expression are always distinctly heard, and so far as quick perception of their sentiments, may prove the assertion, are actually measured in the strictest meaning of the word : but they have never been named. And although all persons who are observant in this way, have nearly an equally acute perception of the expression of speech, they have no language for designating those delicate discriminations which are every day unconsciously made even by the popular ear. I propose to devote the remaining sections of this essay to an analysis of expression : to point out its symbols, and to assign a definite nomenclature to them.

There is perhaps no vain confidence in supposing, that the reader is now well acquainted with the properties of the radical and vanishing movement. This wide reaching function, and master principle of the voice, has been represented under its varied phases, in speech, song and recitative. We have traced

it in the literal elements: have seen its influence in directing the phenomena of syllables: and measured its successions in melody. I have yet to show its instrumentality in the delicate work of expression: and if I shall be able thereby to resolve this marvellous mystery of nature, it will be by substituting that greater marvel of agency, in which a strict economy of means is employed for the production of her infinities.

The general affections of sound were described in the first section of this essay. In summary repetition, they are,—Quality, or kind of sound; Time; Force or the variations of strength and weakness; Pitch or the variations of acuteness and gravity; and Abruptness. These distinctions are universally known.

A delicate perceptibility may easily learn that each of these genera of sound is inclusive of many species, with their different degrees; and that noticeable phenomena result from the combination of the different species of any one genus, with those of another. In the following series, some of the functions arising out of the five genera, and their mutual combinations, are enumerated by the adopted or the invented terms, under which they will be hereafter more particularly described.

Quality,	Wave,
Time,	Tremor,
Melody,	Force,
Pause,	Radical stress,
Grouping,	Median stress,
Aspiration,	Vanishing stress,
Octave,	Thorough stress,
Fifth,	Compound stress,
Third,	Loud Concrete,
Semitone,	Accent,
Downward Concrete,	Emphasis.

These are some of the heads of arrangement which I have devised, for the purpose of opening the way for a fuller and more definite account of the doctrine of expression: and I hope the reader will find, in the detailed consideration of these elements, some approximation towards the development of this interesting department of speech.



## SECTION VIII.

*Of the Quality or Kind of Voice.*

THE Qualities of voice employed as the means of expression, are those of the Whispering, the Natural, the Falsette and the Orotund voices : and those varieties embraced by the common nomenclature of harsh, rough, soft, smooth, full, thin and slender.

There are certain conditions of thought, instinctively associated with appropriate species of these qualities. The whisper always denotes the intention of secrecy : the falsette is used for the emphatic scream of terror, pain and surprise : and the orotund voice alone gives satisfactory expression to the feeling of dignity and deliberation. The natural voice is accommodated to the moderate or lively sentiments of colloquial dialogue, and of familiar lecture and discourse. It is not necessary to particularize here, the sentiments which call for the harsh, soft, full and slender qualities of the voice. The history of their specific appropriation, in the art of reading, may be satisfactorily learned from the common books of professors.

Regarding these qualities as distributed among mankind, some voices are restricted to harshness, or to softness. Few persons have by nature, a pure orotund. Some speak altogether in a meagre falsette : and women are apt to use it in careless pronunciation. There are however few voices which may not, by diligent cultivation, be made capable of exhibiting all the above named qualities.

The elements of expression derived from the *kind* of voice, are not to be regarded solely in the simple and insulated light in which they are here represented. They are susceptible of combination with the various modes and degrees of force, time, pitch and abruptness. In short, quality of voice must necessarily be united with some of the degrees of the other genera. For whatever be the kind, it will be either strong or weak ;

its time must be long or short ; its emission will be abrupt or gradual, and it must be of some definite radical or concrete pitch. Certain qualities of the voice are, however, exclusively congenial with particular conditions of these other accidents : thus smoothness will more generally affect the moderate degrees of force. Similar congenialities may be discovered by the slightest reflection.

It would be easy to select from authors and from familiar discourse, phrases or sentences that require respectively the kinds of voice here enumerated. But I designed originally, to limit the pages of this work, consistently with the intention of definite description ; aiming to make known the hitherto untold elementary principles of speech, rather than to burthen the shelves of literature with compilation. There is no mode of diagram that can represent these qualities of sound : and every attempt to make them plainer than they already stand, in their metaphorical designation, would be without success.



## SECTION IX.

### *Of the Time of the Voice.*

THE degrees of duration of the voice, represented by the terms long, short, quick and slow, are among the most effectual means of expression.

To be definite, let long and short designate the time of syllables relatively to each other ; and let quick and slow refer to the utterance of any series or aggregate of words. Thus a syllable may be said to have a long or short time, or Quantity, as it is usually called in this case ; and a phrase, an entire sentence or a larger portion of discourse may be said to be pro-

nounced in quick or slow time. The occasions for employing these last modes of time are well known. Sentiments of dignity, deliberation, doubt and grief affect the slow time: those of gaiety, anger and eager argument, together with parenthetical phrases assume the quick time in utterance.

I find it necessary however to be more particular on the subject of the length and shortness of individual syllables, comparatively considered; and to extend the analysis somewhat beyond the reach of ordinary prosodial distinctions.

The times of syllables exhibit undistinguishable shades of difference, from the shortest utterable to their utmost prolongation in oratorical expression. In order to reduce this indefinite view of time, to such distinctions as may serve for future reference, let us arrange syllables under three classes: the first embracing those which are fixed to the shortest quantity: the second, those that are fixed or nearly so, to a quantity of somewhat greater duration than that of the first: the third, those that in common pronunciation, are of various lengths, from the shortest to the longest, but which may be indefinitely extended.

To the first class belong many of those syllables terminated by an abrupt element; and containing a tonic, or an additional subtonic, or the further addition of an atonic, such as 'at,' 'ap,' 'ek,' *hap-less*, *pit-fall*, *ac-cep-tance*. It is not the shortness alone of syllables which constitutes the criterion of this class; since some that belong to the third, are in common usage equally short. The syllables now under consideration, have this essential characteristic,—they can not be prolonged, but with deformed pronunciation. The word 'convict,' when accented on the first as a noun, and on the last as a verb, has in plain orthoepy, a certain quantity allotted to each syllable. If, for the purpose of oratorical expression, with the noun, the time of the first syllable is indefinitely increased, the identical character of the word still remains, notwithstanding that prolongation. But when we give the last syllable of the verb, a similar extension, its pronunciation, is, through the drawling utterance, remarkably deformed. The syllables assigned to this first class, not admitting of any alteration in quantity, may be called Immutable syllables. I shall hereafter show their rela-

tions to the movements of pitch, and to the functions of accent and emphasis.

To the second class belong most of those syllables which terminate by an abrupt element, and which contain one or more subtonics or atonics, in union with a short tonic. The subtonics in this case give a greater length than belongs to the syllables of the preceding class; while the abrupt element and the short tonic prevent an indefinite prolongation. Of this class are 'yet,' 'what,' 'mate,' '*grat*-itude,' 'des-*truc*-tion.' In these instances the syllables are longer than the immutables; and for the purpose of expression, the subtonics may be slightly extended beyond their natural length, in simple utterance. But if they should be unduly prolonged, something of the same offensive drawl of pronunciation will be perceived, which is experienced in the greatest degree from the forced extension of the immutable class. As those included under the present head admit of some change of quantity, they may be called *Mutable syllables*.

To the third class belong all those syllables which terminate with a tonic element, or with any of the subtonics, excepting *b*, *d*, and *g*. Of this nature are 'go,' 'thee,' 'for,' 'day,' 'man,' 'till,' 'de-*lay*,' 'be-*guile*,' 'ex-*treme*,' 'er-ro-neous.' If the speaker has a ready command over the subtonics *b*, *d*, and *g*, so as to give full audibility to their essential guttural murmur, their position, at the end of a syllable, does not absolutely prevent an indefinite prolongation, as in the words 'deed,' 'plague,' 'babe,' 'res-*tored*.' But the effect in these cases is by no means to be compared with that of an extension of time upon tonics and other subtonics. In the above pure examples of this class, it will be found, that to whatever necessary degree the quantity may be prolonged, the character of the syllable will still be preserved, without any of that disagreeable effect, which is produced by an indefinite increase of time, under the preceding classes. It is the peculiar nature of these syllables, that they seem to be the same under every degree of duration; while the immutable and mutable, in some cases almost lose their identity by too great an addition to their time. From their allowable variety, the syllables of this class may be said to be of indefinite quantity; or may be called *Indefinite syllables*. They furnish important means for the ex-



pression of speech ; some of its most effective elements, as will be shown hereafter, being made on syllables which admit of this indefinite prolongation.

I do not desire the reader to receive the foregoing classification, as one that should exclusively govern his view of the syllables of our language. The investigation of the causes of expression very soon suggested to me the necessity of other distinctions of quantity than those of long and short ; which, after a millennium and more, of pretending observations, we continue to transcribe from the record of the meagre analysis of Greek and Latin prosody. The phenomena of expression directed the divisions here made ; and the propriety of them, on this ground, may perhaps be hereafter acknowledged. However short of universality this proposed system may reach, even its limited arrangement will be necessary for the explanation of future parts of this essay ; and whatever may be thought of its sufficiency, I must still believe it is high time for the superannuated sages of classical literature to throw aside the Greek and Roman spectacles, in their prosodial researches ; and to try if time, with his new lights, may not have wrought upon them, one of those renovations of sense, which have now and then resuscitated the torpid perceptions of extreme longevity.

The power of giving indefinite prolongation to syllables, for the purpose of expression, is not commonly possessed by speakers. It is true, the daily exercise of the voice is not destitute of forcible expression ; but daily discourse is generally that of mere narration or description ; and its sentiments, those of active argument, or of contending interests, both of which employ, for the most part, the short time of syllables, and the quick course of utterance. Still the assertion that a long quantity is not easily practicable, may seem to the reader, incomprehensible or false : since all who are able to sing, protract their notes to an indefinite length ; and there is no person who does not utter interjections and cries in the same manner. But the mode of prolongation to which I here allude, is that of the equable concrete of speech. Three modes of the radical and vanishing movement were formerly described as respectively used in speaking, and in song, and recitative. Without having regard to the nature and uses of these three functions, it is not

easy to restrict them to their appropriate places. A reader who has not from practice, a facility in executing the prolonged quantity of speech, will be liable, in extending his syllables, to fall into the protracted radical or vanish of song. When persons of imperfect ear, and without a singing voice, by accident observe, remember, and endeavour to imitate the melodious succession of an air, they are apt to utter many of its notes, in the equable concrete of speech. Protracted cries, and interjections which are only more moderate cries, are always made either by the note of song, or by a mode of pitch, to be called hereafter the Wave, or by movements through the higher intervals of the scale: and though these intervals and the wave are both proper to speech, yet the prolonged voice in such cases is the forced effect of passion, which not operating to this high degree, on the ordinary occasions of reading and speech, the cause is not habitual, and the practice not confirmed.

The foregoing notice of the exclusion of the peculiar intonations of song and recitative from speech, furnishes one reason why those persons who possess high accomplishments as singers, are nevertheless indifferent readers or common place actors. I shall in a proper place, endeavour to show other reasons for the general want of interchangeable facility, in the exercise of the arts of song and speech. That to which I now allude, and which arises from the different structures of the radical and vanish in the two cases is not the least influential. The endowed singer may have at command all the means of expression which are used in song. But these are not transferable to the equable concrete of speech; and while he is able to clothe every sentiment of the composer, his attempts at recitation, strip off or tear to pieces, every feeling of the poet.

But to return from this account of the nature of the concrete, to the consideration of the uses of its varied quantity. The immutable, mutable and indefinite times of syllables, have their appropriate mode of fulfilling the purposes of expression. But the opportunity which the indefinite time affords for producing some of its higher effects, must be regarded as of the very first importance in the exercise of speech. This subject will be illustrated in future parts of this essay. Readers who are ignorant of the principles of quantity, are yet aware of the necessity of a slow movement, for the expression of cer-

tain sentiments. They therefore endeavour to supply the deficiency of their power over the long concrete, by slight pauses between words, and even between syllables. But nature and good taste allow no compensation of this sort : they require much of the time which characterizes deliberate utterance, to be spent on the syllable itself, and reject every other mode as offensive monotony or as affectation.

Eminent instances of the essential importance of long quantity may be shown, by considering some existing defects in the syllabic construction of sentences with reference to expression : for since the display of certain sentiments requires the prolonged time of indefinite syllables, it may happen that such sentiments are to be expressed on the limited duration of a mutable, or the mere moment of an immutable syllable. I here illustrate my meaning by a passage from the fourth book of *Paradise Lost*, where Satan is brought before Gabriel. In the dialogue between them, one of the replications of Satan is as follows :

‘ Not that I less endure, or shrink from pain,  
*Insulting* angel! well thou know’st I stood  
 Thy fiercest, when in battle to thy aid,  
 The blasting vollied thunder made all speed,  
 And seconded thy else not *dreaded* spear.  
 But still thy words at random, as before,  
 Argue thy inexperience what behoves  
 From hard assays and ill successes past  
 A faithful leader, not to hazard all  
 Through ways of danger by himself untried :  
 I, therefore, I alone first undertook  
 To wing the desolate abyss, and spy  
 This new created world, whereof in Hell  
 Fame is not silent, here in hope to find  
 Better abode, and my afflicted powers  
 To settle here on earth, or in mid air;  
 Though for possession put to try once more  
 What thou and thy gay legions dare against;  
 Whose easier business were to serve their Lord  
 High up in heaven, with songs to hymn his throne,  
 And practis’d distances to cringe, *not fight.*’

I have marked in italics, the words on which an indefinite quantity is required for the full measure of expression. The word ‘insulting,’ when interpreted by the context, contains

the mingled indications of complaint, pride and reproach ; and these require an element of pitch to be mentioned hereafter, which is made with a long quantity, and which consequently can not be here employed with satisfactory expression on the emphatic syllable ‘sult.’ This syllable belongs to our class of mutables, and can not be prolonged to the necessary degree, except by extending the natural time of the monothong *e-rr*, which is here represented by ‘u,’ or by drawing out the sub-tonic ‘l;’ either of which modes would deform pronunciation. The second instance, marked in the mutable syllable ‘dread,’ contains a declaration of slight contempt ; and this, I shall say hereafter requires an element of expression which calls for a duration of voice not allowed by the natural quantity of the syllable. The last marked phrase of the foregoing passage affords a more conspicuous illustration of the subject before us : for of the words ‘not fight,’ the first is mutable, and the last which is strictly immutable, does not admit of prolongation, without a disgusting departure from correct pronunciation. Now the sentiments of this phrase are those of strong contempt, and of exultation, the expressive symbol of which must be made upon an indefinite time. A reader of discernment and delicate feeling can never satisfy his ear on these words.

To a bad reader all sentences are alike, however improperly constructed for the use of the elements of expression. A good reader, who looks abroad through all the ways of the voice, must often find the tendencies of his utterance in regard to time, restricted by the unyielding nature of an immutable phraseology. The humblest exercise of art, and any mode of quantity suffice to set forth the sense of an author ; but the picture of passion, will be in many cases imperfect, if made on the short time of syllables. He who can assume the spirit of the poet, will not be able to give the prompted expression to part of the last line of the following passage. It is taken from Gabriel’s answer to Satan’s apology for his flight from Hell, formerly quoted, and is a comment on the title of ‘faithful leader’ vaunted by Satan.

O name,

O sacred name of faithfulness profan’d!

Faithful to whom? to thy rebellious crew?

Army of Fiends, *fit body to fit head.*



The six syllables of this last phrase are short, and all the emphatic ones are immutable. They contain a degree of admiration at the well marked fellowship between a ringleader and his crew, mingled with scorn at the wicked faithfulness of the rebellious outcast : and these sentiments, we shall learn hereafter, can not be eminently shown on the abrupt shortness of the time here employed. With an accomplished speaker, the management of this phrase would be like the efforts of a musician of feeling and skill, on a defective instrument : and the different success of his voice, on the above short syllables, and on indefinite quantities would be like the inexpressive chattering of the harp or piano-forte, compared with the rich resources of the violoncello.

The abrupt and atonic elements produce, in discourse, many instances of syllabic construction that hamper expression : But perhaps the greater number of sentences admit of the voices which their sentiments require. For it is not absolutely necessary that every word should join in the expression. One or two well accommodated quantities sometimes sufficiently convey the sentiment of the sentence. The syllable ' Par' of the following line has a natural quantity, which, without impropriety, may be doubled or more in expressive utterance ; and the same may be said of ' bleed.'

*Pardon me thou bleeding piece of earth,  
That I am meek and gentle with these butchers !*

The circumstances of the scene of Julius Cæsar, from which this is taken, inform us that Mark Antony's sentiments, as first expressed in the passage, are those of love, grief and contrition ; his feeling of revenge does not appear until the second line. Those sentiments, I shall show hereafter, call particularly for an extension of syllables. If I am right in the interpretation, the words ' pardon' and ' bleeding' are emphatic, since they respectively picture the special object of the suppliant, and the disastrous assassination, which, with self reproach, he had delayed to punish. The accented syllables of these words admit the prolonged concrete ; and the application of the proper element, to them alone, spreads the coloring of expression over the whole of the sentence.

In the preceding illustration, the reader may discover some

ground for the arrangement of syllables, according to their time, in reference to the subject of expression. But there is another fact in the history of syllabic quantity. We know that from the restricted resources of language the same word has in different sentences, a varied meaning. It is still more common to find the same word imbued with a different sentiment, in its changeable combinations with other words. Now as some sentiments are only properly represented by a short and abrupt utterance, it follows that a word or syllable, which on one occasion frustrates the designs of feeling by resisting the required prolongation, may in another place fulfil the purpose of expression on its immutable quantity. It was shown in an example that the word 'fight' was incapable of the extension necessary for the full display of the sentiment of scorn. When Hamlet in the violent scene with Laertes says,

Why, I will *fight* with him upon this theme,  
Until my eye-lids will no longer wag:

the quick time of the whole sentence is generically inclusive of the short time of its constituent syllables: and the immutable quantity of the word 'fight' admits of that abruptness and force of accent which fully denote the mad but resolute rage of the prince.

Interjections are the only part of speech employed exclusively for the purposes of expression. Those which are common to all languages, consist of tonics, that freely admit of indefinite prolongation. Interjections are the instincts of the animal voice; and nature has allotted them that extendible quantity which is adapted to the demands of feeling. Other parts of speech are sometimes the pictures of mere thought, and sometimes of sentiment: and so it happens that there is a difference in the time of syllables. If words had been invented for signs of feeling only, most of them would have been made with a prolonged voice. As the tonic elements may be uttered either as long or short quantities, and as the abrupt and atonic, in certain positions, necessarily produce short time, it might be inferred that a language which consists entirely of tonic sounds, would be better suited to all the purposes of the voice, than a language which contains elements productive of immutable quantity. But some sentiments are well repre-

sented by a short quantity and sudden issue of sound : and the abrupt elements are, in some of their positions, merely the best contrived means for producing that suddenness with the greatest variety and force.\* And further, the atonics, though not in their own nature explosive, yet arrest the concrete progress of vocality, and thus allow a succeeding tonic readily to take on the abrupt opening. A language made up of sounds, having the qualities of our tonic, subtonic, atonic, and abrupt elements, is well accomodated to the system of those expressive signs, which nature has ordained throughout the whole vocal creation.

The design of employing the prolonged time of the voice, in the emphatic places of discourse, with a view to an expressive intonation, seems never to have been thought of by ordinary writers : and it has been so sparingly exhibited, if indeed it has been at all contemplated by the elect of literature, that it has never received formal notice either in Rhetoric or in Elocution. Dramatists, to whose taste and duty this remark is especially applicable, frequently neglect that proper adaptation of time, which would afford an actor the means of adding the finishing touches of his voice, to the vivid and forcible picture of poetic composition.

The judicious use of the variations of time is the very life of recitation, and the right hand of the rythmus of poetry and prose.

The human ear has cognizance of two kinds of proportion in the quantity of sound : one embracing the relationships of its forces, the other of its durations.

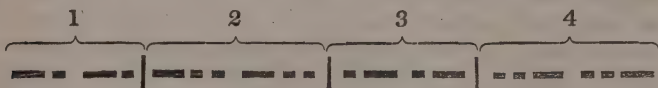
The first consists in the perception of impressions of unequal force alternately successive. Of this there are many species, derived from the order of succession, or the number of the varied impulses ; as exhibited in the following illustration, where the first species shows a heavy impulse followed by a lighter one ; the second, one heavy followed by two lighter ;

\* Those who delight in searching for undiscoverable things, may institute an inquiry, whether the abrupt elements derived their existence in language, from the suddenness which anger and other violent passions assumed, in instinctive utterance, at that nonentity of date, the origin of languages. We here throw away the theme : let Messala, the Roman, who wrote a whole volume on one letter, come back to us and snatch at it.

the third and fourth being respectively the reversed order of the other two.



The second kind of proportions consist of perceptions of the different duration of two or more sounds. Of these too there are species, arising out of the relation of long and short, and the order of succession : as in the following illustration, where the first is meant to represent a sound of given duration followed by one of half or lesser fraction of its time ; the second shows a given time followed by two shorter ; the third and fourth being respectively the reverse in order of the times of the first and second.



The reader can audibly illustrate these schemes by any means of making sounds of different force and duration.

We can reach no further in the investigation of this subject, than to know that the measurement of these proportions is an agreeable exercise to the ear : and that we are more pleased with varied percussions and durations of any mechanical sounds, that have these or other symmetrical arrangements, than with one unvaried succession of similar percussions or times, except regular pauses be interposed between them ; as in the following notation, where the space of a pause is represented between a series of two and of three similar sounds.



Now as the voice has the power of this momentary percussive, and as syllables have different degrees of duration, both of the above forms of sound may be applied to speech. The perception of the former is called Accent, and that of the latter Quantity. To him who has equally exercised his ear in these two modes of measurement, that which consists in the alternations of quantity is by far the most agreeable. For, in the first place, no momentary sound or mere ictus, is musical ;



whereas the prolonged sounds of quantity may be so. Secondly, if the perception of equal momentary sounds with pauses between the given aggregates,—or of unequal momentary sounds, alternately continued, be agreeable, the alternate order of differing quantities will be more so. For, quantity may be made to include the accentual functions; since the forcible ictus of accent may be applied to the beginning of a prolonged syllable: and pauses may be interposed between aggregates that make up the successions of quantity.

I have in this view regarded brute sound only; when quantity is considered as susceptible of expression, its claims over accent are incalculable.

I have introduced these remarks on the quantity and accent of language, with reference to the use of the voice in reading verse: because a principal source of the difference between a good and a bad reader therein, lies in the varied degrees of ability to command the accent and quantity of syllables.

It may be supposed that I allude to the Latin and Greek languages, when I speak of the quantity of verse. I mean the English language, and the partial, though unsought use of quantity, which at present prevails in its measure: and I wish further to intimate my anticipation of the future construction of its versification, on the sole basis of quantity; if the scholastic formalists of literature can be made to believe that the subject of ancient prosody has, for ages past, been exhausted; that the labours of wrangling compilation, are inferior to the works of inventive improvement, and that the investigation of their own respective languages may produce for them the first births of genius, and the consequent undivided heritage of fame.

About the time we are taught to measure the syllables of Virgil, by the relations of long and short, we are told that the genius of our own tongue does not admit of the rythmus of quantity—that English prosody, together with that of other modern languages, is restricted to the use of the alternate strong and weak percussion of accent. For the sake of the general principle in some important matters, we do well perhaps to rely implicitly, for a time, on the instruction of our teachers; but many may find reason to regret the necessity of this confidence in particular instances. From the finely go-

verned and varied quantities of Mrs. Siddons, I first learned, by beautiful and impressive demonstration, that the English language possesses similar, if not equal resources, with the Greek and the Latin, in this department of the luxury of speech : and I thus found myself indebted to the Stage for the opening of that source of poetical and oratorical pleasure, which the more solemn pretences, and the hack instruction of a College, either knew not or disregarded. It was whilst listening to the recitation of this surpassing actress, that I first felt the want of that elementary instruction which would have enabled me to see through the whole of her excellence. I could not, however, avoid learning from her instinctive example, what the appointed elders of my education should have taught me,—that one of the most important means of expressive intonation consists in the extended time of utterance.

I must not be understood here, as asserting that the quantity of English syllables has not been recognized by prosodians ; or that its beauty has not been felt by a good ear, wherever it has been well used accidentally, in English versification and in harmonious prose. I mean to convey a regret that its powers have been undervalued ; that it has been thereby excluded from its place in elementary rhetorical instruction, and that the ear has thus been deprived of one of its highest prerogatives of perception, in poetry and speech.

I have sometimes been disposed to ask whether a classical scholar is gravely in earnest, or only vain of a college livery, in declaring his enjoyment of Greek and of Latin rythmus, whilst he is ignorant of similar resources of neglected quantity, in his own language. The Greeks and the Latins have left us their grammar, their written words, syllables, and elements ; but our uncertainty of the true voice of these elements in their several combinations, has given rise, among modern nations, to a difference in the pronunciation of them. Assuming the English mode, the subject of Greek and Latin quantity may be resolved into these simple principles.—Long syllables, or the temporal effects of long syllables, are made in two ways : First, by the absolute duration of syllables, constituted in the manner of those we called indefinite : Secondly, by such as were called immutable and mutable, followed by a pause ; the time of pronunciation added to the time of the pause, being

equal to a long syllable. Short syllables are made by the short-timed pronunciation of indefinite syllables, or by immutable ones. Now there is nothing in this account of ancient quantity, which is not true of the English language.

But further, not only are these general principles of syllabic construction the same in Greek, Latin, and English, but the very syllables themselves are common to these three languages; nay, I may say to all languages. If the reader will run over any or every line of Homer and of Horace, he will find very few syllables that do not form the whole, or part of some word belonging to his own tongue; both as regards the elemental sounds, and the most exact coincidence of quantity. But it is on the nature of syllables alone, that the doctrine of quantity is founded, in every language. When, therefore, we deny that the genius of the English tongue admits of the temporal measure, we must come to this absurd conclusion, that identical sounds have, in Greek type, the most finished fitness for quantity, and in English have none at all.\*

The remarks here made refer principally to the sound of syllables separately considered. There may be some differences in the several words of these languages, that may render it easier to construct a rythmus of quantity in one than in another: but we speak now of the admission of the system of quantity into English, and not of the comparative ease of its

\* That it may not be thought I have exaggerated this conclusion, I give the following substantial support to it. In the chapter on versification, in Baron Biefeld's 'Elements of Universal Erudition,' after many remarks on the subject of ancient quantity and modern accent, which in nowise qualify the following extraordinary assertion, the author says—'*Properly speaking, there are not, therefore, in modern languages, any sensible distinctions of long and short syllables, but many that are to be lightly passed over, and others on which a strong accent, or inflection of the voice, is to be placed.*' This was written towards the close of the last century, by the 'Preceptor to a European Prince, and the chancellor of all the universities in the Prussian dominions.' Even before his time, some prosodians were not without the sense of hearing; and though, since the epoch of his deep deafness, the existence of long and short syllables in modern languages has been generally admitted, yet it is still held to be impossible to make agreeable measure out of their relations.

In candour, it should be stated that the Baron was a mere compiler; but such writers generally represent current opinions, and they always know more of books and other men's notions, than is either known or coveted by original observers and autocrats in thought.

execution when adopted. There may be some facilities in the Greek for certain kinds of measure, arising out of the greater length of the generality of words in this language. The Greek has certainly an advantage over the English in some of the purposes of vocal expression, and poetic quantity, by the majority of its syllables being indefinite, and by its making less use of the abrupt elements in those positions which produce an immutable time. Greek syllables have, in general, fewer letters than English; and they more frequently end with a tonic element.

The employment of quantity, in the harmonious composition of English prose writers, produces portions of the regular measure of Greek and Latin lines. If these occasional passages of temporal rythmus are well accommodated to the genius of the English language, I aver, I do not see why the studied contrivance of a poet might not use those existing quantities, in the continued course of verse. The following sentence has not the accentual form of any of our established metres, and is therefore, in its rythmus, purely English prose :—Rome, in her downfall, blazoned the fame of barbarian triumphs. This sentence derives its impressiveness, from the position of its long and short quantities. Now the position is exactly that of a Latin and of a Greek hexameter line, as may be seen by comparison.

Dactyl		Spondee		Dactyl		Dactyl		Dactyl		Spondee	
Εν	δι' ἑτῆς	οἱ	ῥαοὶ	τῆς	α	ἐνδοῖς	πικρῶς	οἱ	ἰστούς		
Si	nīhīl	ēx	tānt	ā	sūpē	rīs	plācēt	ūrbē	rē	linquī	
Rōme	īn hēr	dōwnfall	blāzōn'd	thē	fāme	ōf bār	bārīān	trīumphs.			

If this last sentence be read with its proper pauses, and with deliberate pronunciation, it will correspond in measure with the long and short times of the superscribed Latin and the Greek. I would not, however, think it strange, for anticipation takes off the edge of surprise, if a classic scholar should deny the identity of its temporal impression, with that of the collated lines. We are so little accustomed to regard English syllables in reference to their quantity, that it is difficult, at first, to make it even a subject of auricular perception. For he who, according to vulgar persuasion, believes that there in an openness in the senses to receive all the objects which are



brought near them, greater than that which exists in the mind for the reception of new subjects of reason or reflection, plainly indicates that he has no more than common-place knowledge of the ways and powers of both the senses and the mind ; since the senses have equally their ignorance, obstinacy, and prejudice ; they equally see plainly what has been seen, and for a long time can see no more. A well cultivated eye and ear are as rarely found as a well disciplined mind ; and a wise master in human policy and morals, would not find more difficulty, where interest is not inimical, in effecting his designs of melioration, than an original observer in physical science would experience, from the mass of the world, upon soliciting an immediate assent to the reality of the most manifest developments of nature, or the most useful inventions of art. It is an easy and a passive thing to look and to listen ; but, if I may make an antithesis of these words, it is another and a difficult exertion to see and to hear.

In speaking of the indefinite syllables of the English language, it was said that their time might be varied without blemish of pronunciation ; and it was formerly shown, that the abrupt elements, which generally terminate immutable syllables, have necessarily, after the occlusion of their sound, a pause that allows an immutable syllable to hold the place, and fulfil the function of a long one. With these legitimate materials for the construction of a temporal rythmus in English versification, nothing but deafness or prejudice, prevents our perceiving that its institution has been strongly prompted by nature, and is already half established in our poetry. We allow a reader full liberty over the quantity of syllables, for the sake of expression in speech ; and song employs the widest ranges of time on tonic sounds ; why should we refuse to the measure of poetry a less striking departure from the plain pronunciation of the language.

Mr. Sheridan, who does not overlook the existence of quantity in the English language, and its use in the expression of speech, but who, nevertheless, maintains that the genius of our tongue is exclusively disposed to the accentual measure, seems to ground his opinion, on the special rules of Greek and Latin prosody not being applicable to the phenomena of varying time in English pronunciation. He might as fairly have con-

cluded that the good English style of his own lectures could not be as perspicuous as the Latin, because his natural mode of construction is different from the appropriate inversions of the latter tongue.

The broad inquiry on this subject is,—Are there both long and short syllables in the English language; and can these varying quantities be so arranged as to produce an agreeable *rythmus*? The brief answer to this question is,—That we have, equally with the Greeks and Romans, the variation of long and short, in syllables; and it requires other arguments against the practicability of employing it in metre, than that derived from its having never yet been done. I would not choose to contend with him who doubts that quantity necessarily belongs to every spoken language. The ancients not only recognized it in theirs, but by a deep attention to its nature, availed themselves of its uses in the creations of literary taste. If Greek and Roman prosodists, in recording their special rules for the quantity of particular words, had furnished us with a little of that philosophy of elemental and syllabic sounds, which authorized or instinctively produced the rules of their scansion, the moderns would, in all probability, have seen its application to their own languages.

There is some ground for the opinion, though this part of history is not altogether clear, that the restricted melodical nature of Greek music, its relation to song, together with the care therein taken to adjust the temporal correspondence of syllables with notes, and its forming part of the liberal education of Grecian orators, poets, and philosophers, led to the close investigation of quantity, and finally effected its adoption as the basis of the poetical composition of the Greeks. The modern extension of the science of music to the principles and resources of the ingenious system of harmony, has rendered it independent of the support of words; and the nice measurement of their time has been neglected, since the separation of the formerly united duties of the composer and the poet.

I can not pass by the conjecture, but I leave others to determine its truth,—that the establishment of Greek *rythmus* on the function of quantity, did contribute, with other causes, to the improvement of the euphony of that language. We know what alteration rhyme, and the accentual measure have made

in the pronunciation of English ; and there is fair reason to believe, that one means of working a change to greater harmony, would be, to found its versification on quantity. The occasional wants of poets would prompt them to change many of our immutable syllables to indefinites ; would suggest the elision of atonic or abrupt elements from the ends of syllables ; and thus, by those large labours which the mere critic seems not to contemplate, and certainly never has accomplished, our language might be invited towards that condition of syllabication which constitutes, in part, the harmony of the Greek. We know that the diæresis and other licenses of Greek versification, to say nothing of the dialects, were constantly used for facilities of poetic quantity, in that language ; and we might inquire, whether the addition to its alphabet of the Heta and Omega, was not part of the contribution, suggested and afforded by the circumstances of the temporal measure.

Those who are in the habit of poetical composition, in the common accentual method, know how readily words of suitable accents are associated with the demands of versification. Nay, the fluency of the ear, if I may so call it, is in this matter so unfailling, that if the sense of words be disregarded, there will be no hesitation in sorting such unmeaning discourse into any assumed accentual measure. I mean, that a person with a quick poetical ear, and a free command of language, will find no difficulty in carrying on, for any duration, an extempore rythmus of mere unrelated words or phrases. But a person who is not in the practice of metrical composition, even if he be aware, from rule, of the requisite succession of accents, will show as much delay in gathering words to fulfil his accentual purposes, as the former would have, under the present state of the English ear, in aptly furnishing syllables for a temporal rythmus. Habit must have given to the extemporising poets of Greece, the same elective affinity of ear, if I may speak so, for the appropriate quantity of their verses, as the Improvisatori of later Italy had for their required accents. At least two-thirds of the accented syllables of English words are indefinite in their time, and may, at pleasure, be made either long or short. This resource for measure may be employed. Until, therefore, we have a larger experience upon the rythmus of quantity, in modern versification, and until the English ear



knows more of the appreciable time of syllables than it can at present boast, we may be justified in considering the denial of the susceptibility of a temporal rythmus to modern languages, as a mere assumption.

I am aware that the number of monosyllables and dissyllables in our language, exceeds that of the Greek; and this may possibly render the former less fit than the latter, for the construction of certain systems of measure. On this ground it has been asserted that English words could not be arranged in an agreeable dactylic succession. This may be the case, but we have too little slight in the management of quantity, to justify a positive opinion on this point; and the trials which have been made, are not quite decisive. Habit is a forestalled and obstinate judge over existing institutions, and often pronounces unwisely upon their better substitutes. It is very certain that an anapæstic measure, founded on a mixture of accent and quantity, and nearly identical in effect with the ancient full dactylic line, is well suited to the syllabic and verbal condition of our language; and that a very agreeable rythmus is produced by it.\* Admitting the above objection, it will not overrule the design to establish the forms of Iambic and Trochaic measure, now in use, on the basis of quantity alone.

Although English versification is avowedly founded on the accentual rythmus, entire lines are occasionally found, so satisfactorily fulfilling all the conditions of the temporal measure, that they might be judged by the revived poetical ear of a Greek. But such lines are always preceded and followed by others, founded on the mingled functions of both quantity and accent. A rythmus composed altogether of accent, if such a

\* Let us subjoin a word here, for our delusions and prejudices. The dactylic foot, and the anapæstic, fall with a similar impression on the ear. The ancients used the former for themes of the highest dignity; and school boys are taught that it richly and gravely fulfils its purpose. We use the anapæstic foot for dog-grel and burlesque, and believe too, that there is something in its light skip peculiarly adapted to the familiar gayety of its modern poetic use. Let a deaf worshipper of antiquity and an English prosodist, settle this matter between them: for, to serve a purpose, even the opposite ends of contradiction can be made to meet. I will only say, in the words by which the Yezedi of Persia, who worship the devil, briefly explained their faith, and pertinaciously defended it against a Christian missionary—"Thus it is."



thing could exist in speech, would be agreeable, though less so than one composed entirely of quantity. A versification made up of both these functions, might give no offence to a person uninformed of the nature of quantity ; for, since syllables which are constructed on the basis of quantity, may exhibit likewise the effect of accentual stress, the system might pass for one of entire accent. He who is skilled in the art of measuring the time of syllables, will, over this compounded rythmus, be shocked by the irregular and unexpected variation of its dissimilar impressions. An ear of delicate prosodial organization, which yet makes no analysis of its perceptions, often experiences this rythmic violence from English verse, but is ignorant of its cause. He whom nature has made a poet, by refinement of ear and by copiousness of words, instinctively avoids, in composition, much of the evil of these conflicting systems. But writers who have only a poor unfurnished ambition, who know nothing of sound, and who promiscuously mingle in their lines, the weight and the measure of syllables, commit distressing offence against those who, from some necessity, may have patience to go through their works. One of the charms of a good reader of verse, consists in his changing our metrical accents into conspicuous quantities, by protracting the voice on all those syllables which have a stress in the measure, and will bear prolongation.

From all that has been said on the comparative natures of quantity and accent, and from the slow progress of modern nations in distinguishing the relations of the former, it would seem, that, of these two metrical impressions, accent is more easily recognised. Nor is it unwarrantable to infer, from the greater facility in arranging the accentual measure, that the first rythmic essays of all nations were made in this mode of versification ; and that the Greeks themselves passed through this rattling amusement of poetical childhood. We owe no obligation to authority or fact, in opposition to this assumption ; and I could as soon be persuaded that the first instrumental music of Otaheite was not the clattering of shells, as that the earliest songs of Greece were measured by the nice relationships of time. Our language is not indeed young in duration, but it is still in its infancy on this point : and many of those who have worked with good wishes, but ineffectual

means, towards its improvement; and who, by taste and authority, have been qualified to listen to living voices, with progressively meliorating influence upon them, have only wandered off with an unavailing ear, among the silent graves of language in the remote realms of antiquity. We all feel an august delight over the works of the distant dead: There is scarcely a page of the poetic rythmus of the Greeks and the Romans, or a remaining trace of their plummet and chisel, that might not make me forget, through intense contemplation, the mere seclusion of a prison. But I could as soon admit, that the modern zeal in freighting our homeward ships with the fragments of their temples; and the covetousness of nations for the very purloined possession of their statuary, ought to preclude the future use of the marble of our mountains, for the accomplishment of equal or transcending works of art, as that a just admiration of classic measure should prevent the endeavour to transfer to our own language, the admissible principles of Greek and Roman poetry.

I have offered the last few pages of this section, as no more than digressive and desultory remarks on a subject intimately connected with the time of the voice, and with the cultivation of an important but neglected accident of speech.

The English language has an unbounded prospect before it. The unequalled millions of a great continent must hold a wide community, in the pleasures and interests of its advancement. I can not so far undervalue the emulative efforts of that great population which must hereafter form its literary class, as to suppose they will all merely vaunt in retrospective vanity, over what has been done, and not extend their views to other and deeper resources of their art. But, in thus looking forward to the establishment of English versification, on the basis of quantity, I see the limitation of the poet's abundance, by the substituted excellence of his few but finished lines. Our measure is now drawn from the two different sources of accent and quantity. To construct a rythmus by quantity alone, will require more rejections, and a wider search in composition; more copiousness in the command of words; more accuracy of ear, and longer labour for a shorter work. I am here speaking of the great products of the pen. Of these, as of all perdurable human excellence, labour must be the means; and the

calculation of its extent will therefore always form one of the duties of judgment, in decreeing reward. Let him who could patiently devote a life to laying up store of 'goodly thoughts' for *Paradise Lost*, unravel the idler's fable about the inspiration of the immortal works of man. Let them, who to the soul of genius have joined the strong body of laborious care, say, in what consists the true life and the embalming of fame: let them touch the sleeve of early and voluminous authorship, and whisper one of the useful secrets for accomplishing more to instruct and please, and less to perish.



## SECTION X.

### *Of the Expression of Melody.*

A comprehensive account of melody, would properly represent it as produced by a variation in the time, pauses, and pitch of the voice; since the well appointed uses and disposition of these accidents, make up the agreeable impression of speech. In two previous sections I have discussed separately the subjects of time and pitch. I propose to consider here, how far merely the progressive steps of melody are instrumental in the work of expression.

The various successions of radical pitch were, on a former occasion, traced to their ultimate forms, and designated by the definite terms of their phrases. I have now to show that some of these phrases may be employed as the appropriate signs of certain sentiments. The design of this section does not embrace the consideration of the triad of the cadence which properly expresses no more than a feeling of repose: and it has been already shown in its proper place, that a varied succession of all the phrases, produces the plain and unobtrusive effect of the Diatonic melody.

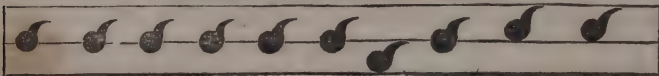
The Monotone and the Alternate phrase, are the only modes of melodial progression which attract the ear by a peculiarity of character, and thereby fulfil any remarkable purpose of expression.

A predominance of the monotone in melody, is suited to feelings of dignity, grief, tenderness, solemnity, and serious admonition.

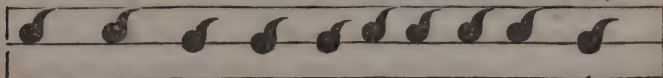
The phrase of alternation is expressive of the more active sentiments of anger, joy and facetiousness, and to the earnest strife of argument. It is, however, to be taken into view, that the current melody must not consist altogether of either of these phrases. This would produce a disagreeable uniformity. The monotone should be occasionally broken by the rising or falling ditone; and the alternation as frequently varied by a limited monotone.

An illustration of the dignified expression of the monotone may be given, on that magnificent picture of Satan's imperial presence in Pandemonium, at the opening of the Second Book of Paradise Lost.

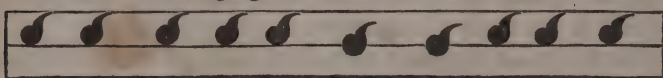
High on a throne of roy—al state, which far



Out—shone the wealth of Or—mus and of Ind,



Or where the gor—geous East with rich—est hand



Show—ers on her kings : bar—ba—ric pearl and gold,



Sa—tan ex—alt—ed sat.





The greater part of this melody is in monotone. I do not say the passage requires, exclusively, the order here given to the variations from the predominant phrase, since an accomplished reader might alter the arrangement with equal or superior effect. But I venture to claim that reader's accordance with the confident assertion, that if an equal amount of monotone, however disposed, be not allotted to these lines, the utterance will be, according to the degree of deviation, more or less at variance with the sentiment of the poet, and the rapt dignity of the reader's contemplation.\*

\* With due apology for the digression, I beg leave to return for a moment to the subject of the last section, by remarking, that the poet, with a rich instinct of versification, has thickly set the lines above quoted, with long quantities, in happy adaptation to the stately sentiment of the description.

I use here, rather remarkably, the term *instinct of versification*, not in oversight of the bright intelligence with which this extraordinary man executed every high design and every tittle of his work; but because it is clearly seen, he did not intend to construct the measure of his poem by the rules of quantity alone. The development of the resources of the accentual measure by Milton, was a new and absorbing labour. Had this advance-step preceded him, the originality and restless enterprise of his genius would most probably have joined with the many principles of Greek and Roman composition, so happily transferred to his own language, the accomplishment of the supposed impossibility of adopting the mode of their rhythmus. In the above example, where the majesty of his thought secured so much homage from his ear, some of the quantities suddenly arrest that perception of continued movement and deliberate dignity, which the protracted time of the generality of the measure produces. The syllables 'state,' 'rich,' and 'sat,' are too short, for the otherwise good iambic temporal rhythmus of these lines: and the word *barbaric* occasions some irregular contrariety in the impressions of quantity and accent. In the abstract pronunciation of this word, the first syllable, 'bar,' is somewhat longer than the second, which, by its nature will not, in this case, bear unusual extension. But the longer syllable is here in the place of the weak syllable of iambic accent; and the impressiveness of exceeding length thus reverses the succession of the prevailing rhythmus. Nor does the simple meaning of the epithet 'barbaric,' allow a sufficient degree of accentual stress on the second syllable, to over-rule the impressiveness of the greater length of the first. If the reader will substitute the adjective 'orient' for 'barbaric,' and overlook the deterioration of style produced by the change, he will perceive, by comparison, the difference between the accentual and the temporal rhythmus, which I have just endeavoured to explain.

Shōwers ōn | hēr kings | hēr ōr | iēnt pēarl | ānd gōld.

Now, whether the first and the fourth foot be considered respectively in their order, a trochee and an iambus, as I have marked them, or as a dactyl and an

The following notation of the description of Abdiel's encounter with Satan, from Milton's sixth book, exemplifies the use of the alternate phrase, in the expression of the earnest excitement necessarily produced by the eventful scene :

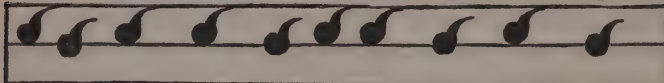
So say—ing, a no—ble stroke he lift—ed high,



Which hung not, but so swift with tem—pest fell



On the proud crest of Sa—tan, that no sight



Nor mo—tion of quick thought, less could his shield



Such ru—in in—ter—cept.

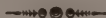


anapæst, as they may be read, consistently with the genius of our iambic measure, I do assert that the admissible prolongation of the indefinite syllable 'or,' produces a dignity of utterance, not equally effectible on the short time of the accented syllable of barbaric. And I add further, that this line does fulfil the conditions of poetic quantity, as completely as any line that ever was constructed with Greek or with Roman words.

If the reader would know how certain words may be pronounced as a foot or prosodial phrase, either of two or of three syllables, let him recur to our principles of syllabication, formerly laid down. The word *showers* is one syllable, when the 'e' is omitted; the diphthongal tonic 'ou,' vanishing directly into the subtonic 'r.' If the sound of 'e' is retained, that element requires a radical, and the word becomes, thereby, of two syllables. The trissyllable 'orient,' is reduced to a disyllable, by withholding a radical from the sound represented by 'i;' and thereby

In this scheme, I have used a limited variation of radical pitch, with the design to show plainly the alternation. Good recitation would require a wider range: still the alternate phrase should predominate. A prevalence of the monotone throughout this passage, might represent the dignified courage and calm security of an aggressor, confident of success: but it would be misapplied and faded coloring for the hurried mingling of watchfulness and dreadful expectation, which the description of the huge impetus is calculated to excite.

Besides these two modes of expression by particular phrases, there is a certain effect produced by an ascent and descent of the melody, through the whole extent of the voice. My design leads me no further than to ascertain and illustrate the general principles of this subject. In the sixth section, I gave the notation of a passage from Othello, in which the progression is represented gradually rising and falling, through the whole compass, corresponding with the variation of force in the sentiment: it is therefore unnecessary to trouble the reader with a similar delineation.



## SECTION XI.

### *Of the Intonation at Pauses.*

THE term Pause, in elocution, is applied to that occasional silence in discourse, which is greater than the momentary rest between syllables.

dropping that sound as a distinct syllable. Now 'i,' in the trissyllable, is expressed by the proper sound of *ee-l*, and this element passing readily into the subtonic 'y-e,' coalesces with the succeeding tonic to form one syllabic impulse. The word 'orient,' in correct pronunciation, is a true dactyl in quantity; I have set it as an iambus, not intending to defend the propriety of the contraction, but for the purpose of constructing thereby a regular iambic line, and to illustrate one of the principles of English pronunciation.

Pauses are used for the more conspicuous display of sense and sentiment, by separating certain words or aggregates of words from each other.

Without entering here, into a circumstantial exposition of the philosophy of grammar, every sentence may, in the most general view, be regarded as resolvable into two constituent generic parts of speech ; the substantive, with its accidents of being, and the verb, with its various modes of action : all other symbols of thought being only specifications of the attributes of that being and that action, throughout the modes of time, place, degree, manner, and all other possible relationships of things. Now the pause separates the aggregates of words which describe those existences and agencies with their qualifications : and whilst the continuity of utterance within these sections, gives unity to the impression on the ear, the understanding remains undistracted through the temporary restriction of the scope of attention. The division of discourse, by means of motion and rest, prevents the feebleness or confusion of impression which would result from an unbroken procession of speech, no less remarkably than the skilful disposition of color, and light and space, disentangle the objects and figures of the canvass from the unmeaning positions and actions of a chaos and a crowd.

The extent of the sections of discourse, thus separated by pauses, varies through all increasing degrees, from the limits of a single word to the inclusion of a full member of a sentence. There are, indeed some purposes of expression which require a pause even between syllables. It was shown, in treating of syllabication, that the full opening of the radical can not be completely made, except it is preceded by an occlusion of the voice. Now the accented syllable of the word '*at-tack*' being an immutable quantity, can receive a marked emphatic distinction, only by means of an abrupt explosion of the radical, after a momentary pause.

The times of the several pauses of discourse vary in duration, from the slight inter-syllabic rest, to the full separation of successive paragraphs : the degrees being accommodated to the requisitions of the greater or less connexion of the sense, and to the peculiar demands of sentiment.

All the parts of a continued discourse, which has the least



unity of purport, should bear some relation to each other. But these relations being severally more or less close, grammatical points were invented to mark their varying degrees. The common points are, however, very indefinitely effective of their purposes, in the art of reading. They are described in books of elementary instruction, principally with reference to the time of pausing; and are addressed to the eye, as indexes of grammatical structure. The symbols of interrogation and of exclamation are said to denote peculiarity of tone; yet even with this vague reference to a rule, the ear is still without a guide in this important branch of elocution. The efficacy of punctuation should consist not more in ordering the measure of time, than in directing an appropriate intonation; and a just definition of Pause would, perhaps, be as properly founded on variations and distinctions, produced by the phrases of melody, as on the different duration of the time of rest. I am not informed that any other writer, besides Mr. Walker, has taught the necessity of regarding the inflections of the voice, in the history of pauses.

It is of much importance in speech, with regard to mere variety of sound as well as to sense and expression, to apply the proper intonation at pauses. The phrases of melody have here a positive meaning, and often mark a continuation or a completion of the sense, when the style and the temporal rest alone would not to an auditor be decisive of its nature. But the purposes of pausing being varied, an appropriate intonation must by its changes prevent that monotony, which is so common with most readers at the grammatical divisions of discourse.

The effect of pause, in relation to the separation by time, will be illustrated in the next section on the Grouping of the voice; and I now proceed to describe the successions of pitch, to be used at the different places of rest.

The triad of the cadence denotes a completion of the preceding sense, and is therefore inadmissible, except at a proper grammatical period. But it does not follow that reciprocally it must be always applied at the close of a preceding sense; for in those forms of composition called loose sentences, and inverted periods, there are members with this complete and in-

sulated meaning, which nevertheless do not admit of the downward closing phrase.

The rising tritone indicates the most immediate connexion of parts separated by the time of the pause. The ditone carries on the sense in the next degree. The phrase of the monotone denotes a diminished relationship between divided members : the falling ditone still less : and the downward tritone produces the fullest suspension of sense, without obstructing its further continuation. The triad of the cadence being the maximum of distinction among the parts of discourse, the comparison of its downward intonation with the courses of the other phrases, may serve to explain the causes of the varying indication of each, by showing the gradations of departure from the form and direction of the disuniting cadence. The degrees of connexion between the members of sentences are so various, and the acceptance of them by readers may be so different, that it would not be safe to propose a scheme for appropriating definitely the kind of phrase to every instance of pause. From present knowledge on this subject, I would say generally that the intonation of some pauses may be varied without exceptionally affecting either sense or elocution : but I am confident in asserting that there are cases in which the species of phrase is absolutely unalterable.

The foregoing remarks on the use of the phrases of melody, have not been made in allusion to common grammatical punctuation. Writers on elocution have long since ascribed the faults of readers, in part, to the vague nature of these points, and to the distracting effect of the caprice of editors in using them.

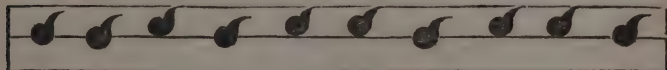
In the notation of the following passage I shall apply the phrases of melody, with reference both to my own acceptance of the sense of the author, and to the distinct and vivid picture, producible by utterance, without regard to the directions of its punctuation. It is thus pointed by the editor :

So spake the seraph Abdiel, faithful found  
Among the faithless, faithful only he ;  
Among innumerable false, unmoved,  
Unshaken, unseduced, unterrified,  
His loyalty he kept, his love, his zeal ;  
Nor number, nor example, with him wrought  
To swerve from truth, or change his constant mind,  
Though single.

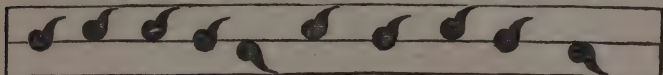
When the reader looks upon the changes I have made in the punctuation of these lines, I must beg him to bear in mind, that whether his decision is favorable to it or otherwise, it may still illustrate my idea of the power and place of the phrases. If this be accomplished, I shall not dispute about the free will of taste, in the particular use of these phrases. My object in this essay, is to explain the functions of the voice: not to contend with expositors and critics.

When I speak of the employment of a phrase of melody, at a pause of discourse, it must be understood that the phrase is to be applied to the last syllables preceding the pause. Nevertheless, for particular purposes of expression, the monotone may be continued on the succeeding syllable.

So spake the se—raph Ab—diel, faith—ful found



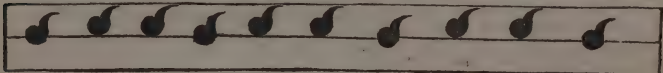
A—mong the faith-less. Faith—ful on—ly he.



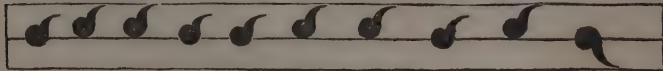
A—mong in—nu—me—ra—ble false, un—moved,



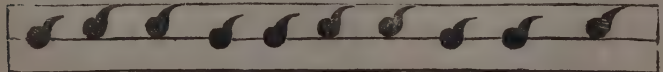
Un—sha—ken, un—se—duced, un—ter—ri—fied,



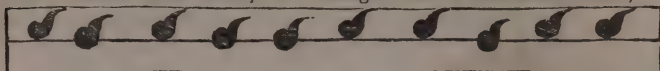
His loy—al—ty he kept, his love, his zeal.



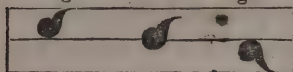
Nor num—ber, nor ex—am—ple, with him wrought



To swerve from truth, or change his con—stant mind,



Though sin——gle.



The first pause at 'Abdiel' is marked with a falling ditone, because the included member does not necessarily produce the expectation of additional meaning or qualification: and because this phrase does not absolutely dissolve the grammatical concord between the members which it separates. I have set the triad of the cadence at 'faithless,' not exclusively upon the right to assume the sense as here completed; but with a view to prepare for the eminent display of the sentiment contained in the remainder of the line. The editor has marked the pause with a comma, and thus made the three succeeding words a dependent clause. I have regarded this clause as an elliptical sentence; not only because I might be justified in so doing by a grammatical resolution of it, but more especially in order to promote the expressive effect of utterance. These words reiterate the previous attribution of faithfulness to Abdiel, with the further affirmation of his singleness in virtue. This definite and emphatic restriction of the individuality of the subject, is made with mingled sentiments of regret over the rebellious rejection of truth, and of exultation that Abdiel alone has the undivided merit of defending it. There is a touch of feeling in these sentiments, which even with all other due means for an appropriate utterance, can not be answerably displayed, except the phraseology of those sentiments is separated from that of preceding and succeeding thoughts, by the marked distinctions of the cadence. If the word *faithless* be read with what is called, in the schools, a suspension of the voice, which in their indefinite language means avoiding a fall—the spirit of the clause which follows will be perverted or lost. Milton's fine ear and his high passions qualified him to be a good reader; and though he may not have been one by practice, I would with difficulty believe that he *thought* the pas-



sage we have been here considering, with the close sequence which is implied by the editor's comma and semicolon.

The next pause at 'false,' is preceded by the rising ditone. The structure of this member evidently creates expectancy, and the species of intonation indicates the continuation of the sense.

Of the four succeeding pauses, each rests on a single word. The three first are noted with the monotone, to foretel the continued progression of the sense : the fourth, at 'terrified,' has the falling ditone, to denote a change, but not a close of thought. In ordering these four pauses, variety might be shown, without affecting the sense, by giving to the two last syllables of 'unshaken,' a rising phrase. The phrase at 'kept' is the rising ditone ; for since 'love' and 'zeal' are equally, with 'loyalty,' the objectives of 'kept,' and these objects being disjoined by construction, no other phrase at 'kept,' would so closely co-operate with the full pause which I have set at 'zeal,' and thereby tend to impress on an auditor the true syntax of the sentence.

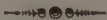
At 'zeal,' which is marked by the editor with a semicolon, I have applied a period, and a form of the cadence ; for this close, by throwing back 'love' and 'zeal,' as objectives, prevents their bearing forward as nominatives to some expected verb ; which might not be obviated by employing, at this place, one of the continuative phrases of melody with a semicolon. The use of a cadence in this place puts the true grammatical construction of the sentence altogether out of doubt with the auditor. One can account for the employment of a semicolon at 'zeal,' by presuming that the editor considered the following word 'nor' as a connective. It certainly begins a new sense ; and in regard both to its place and its immediate repetition, may be looked upon as a poetical inversion and a redundancy of negative. The remaining part of the notation contains examples of the principles just elucidated, and therefore needs no explanation.

I have thus endeavoured to begin an effort towards supplying a blank in elocution, by giving a definite description of the modes of intonation, to be joined with the rests of the voice ; and by illustrating the manner in which we may frame principles, to direct the use of the several phrases. Those who desire

knowledge of the structure of sentences, for the purpose of applying these principles, may consult books of rhetoric. Mr. Sheridan writes, with his usual ability, on the nature of pause, and gives numerous exemplifications of its proper use. But he makes no analysis of that intonation which he must have judiciously joined with it, in the accomplished practice of his voice. Mr. Walker has also given a masterly treatise on this subject, in his *Rhetorical Grammar*. He wisely saw the practical utility of uniting with the doctrine of the temporal purpose of pause, an enquiry into the applicable modes of intonation. In a philosophical view of the subject, his treatise contains no description of the functions of pitch, beyond the general distinctions into rise and fall, and turn, which had been made long before his time. Mr. Walker undertook the investigation of the nature of speech, without possessing a discriminating ear; without sufficient familiarity with the known distinctions of sound, and without seeming to keep in mind the means of philosophical inquiry. The example of the highest masters of science, had taught that all he could aim to accomplish by his research, would be, to observe the phenomena of the voice, and to class them with known facts in the history of sound. But the most precise nomenclature of the properties of sound, if not the most comprehensive history of them, is contained in the science of music: and Mr. Walker appears to have had too feeble or too limited a perception of its clear and abundant discriminations, to produce a recognition of identity or analogy between the modes of the speaking voice and the familiar phenomena of musical sounds.

Even though we might despair that future inquiry will teach us the structural cause of the vanishing movement, and of the *orotund* and *falsette* voices: still it is certainly now within the ability of a disciplined and attentive ear, to discover whether sounds, supposed to be peculiar to the human voice, are similar to others that have been accurately measured and definitely named, in the classifications of music; and consequently whether they might be designated by the same nomenclature, as far as the terms of music are applicable to the phenomena of speech. Such a mode of investigation, with its satisfactory results, being the whole means and gains of a true and useful philosophy, we might as well believe that the Newtonian discoveries in

optics, could have been effected without a previous acquaintance with the laws of motion, the variety of colors, and the relations of magnitude and number,—as look for a development of the modes of the human voice, by him who is ignorant of the known distinctions of sound.



## SECTION XII.

### *Of the Grouping of Speech.*

I HAVE adopted a term from the art of painting, to designate the instrumentality of pauses, and of certain affections of the voice, in uniting the related ideas of discourse, and separating those which are unrelated to each other.

The inversions of style, the intersections of expletives and the wide separation of antecedents and relatives, which are allowed in poetry, may be made sufficiently perspicuous, through the circumspection of the mind, and the advancing span of the eye, in the deliberate perusal of a sentence. But in listening to the speech or reading of others, we can employ no scrutinizing hesitation : and though the memory may retrace, to a certain limit, the intricacies of construction, the best discernment can not always anticipate the sense of a succeeding member, nor the nature and position of its pause. The higher poetry, in the contriving spirit of its eloquence, gives many instances of extreme involution of style. A reader therefore, is frequently obliged to employ other means, for exhibiting the true relationship of words, besides that simple current of utterance, which may be sufficient for the clear syntax of a more natural idiom.

The means by which deviations from the simple construction of sentences may be rendered perspicuous in delivery, are,—

Pauses, which are here to be regarded merely as divisional agents :—

The Phrases of melody, that have been already in part explained ;—

The reduction of the pitch and force of the voice, for which I use the term Abatement :—

A quickness of utterance, that I here call the Flight of the voice : and—

A mode of indicating grammatical connexion, which may be named the Emphatic Tie.

I have summed up the several means here enumerated, under the generic term Grouping, in order to explain their purposes by metaphorical illustration ; and have distinguished each by a specific name, thereby to invite attention to the subject, by the institution of a definite nomenclature.

The most common method of grouping the related parts of a sentence, under the bond of a given condition of the voice, is that which is effected by its continuity within the limits of Pauses. This subject is so extensively treated in the art of elocution, that I give here but a single instance of the power of the pause, in separating the confluent ideas of a sentence, and in giving the proper independency to each. Let us take, from the second book of *Paradise Lost*, the description of Death's advancing to meet Satan, on his arrival at the gates of hell.

Satan was now at hand and from his seat  
The monster moving onward came as fast  
With horrid strides.

I have omitted the punctuation of this passage : which if correspondingly read without a pause, would not be absolutely destitute of meaning ; for the auditor would understand the general course of the action described. But the force of expression which makes a vivid picture of the whole, through the distinct individuality of its parts, will be entirely lost. There are in this sentence four separate groups of thought, which should be indicated by three pauses.

Satan was now at hand—and from his seat  
The monster moving—onward came as fast—  
With horrid strides.



The first division, ending with 'hand,' gives notice of the rapid approach of Satan. The second represents the monster Death rising from his seat, and is insulated by a pause at moving. This division is properly separated from the next, 'onward came as fast;' for though it describes the further movement of Death, and in this view might seem to forbid the separation, yet its principal aim is to show the speed of his progress by comparing it with that of Satan, and this justifies the distinction which is here made. The last division, 'with horrid strides,' must be separated from the preceding: for if it were read—*onward came as fast with horrid strides*, the immediate connexion of the manner of movement with the declaration of the likeness between the time of it, in the two characters, might authorize the conclusion that Death was striding as fast as Satan was striding. Whereas the pause at 'fast' refers that mode of progression to Death alone, agreeably to a previous part of the context, which describes Satan as moving on 'swift wings.'

Some of the uses of the Phrases of melody were stated in the preceding section. I here offer one or two examples of the effect of an appropriate melody, in carrying on the connexion of thought, and in producing an immediate perception of grammatical concord:

On the other side,  
Incensed with indignation, Satan stood  
Unterrified, and like a comet *burned*,  
That fires the length of Ophiuchus huge,  
In the arctic sky.

If the phrase of the falling ditone be used at the pause which must be made at 'burned,' it will, to the ear, destroy the concord between the relative 'that' and the antecedent 'comet.' But by applying the monotone, the relationship between these two words will be vividly impressed, notwithstanding the intervening pause at 'burned:' the grouping power of the melody, in this case, counteracting the dividing agency of the pause.

A similar instance of the influence of the monotone, in effecting a close connexion of the antecedent with the relative, may be perceived at the pause after 'unheard,' in the following lines:

First, Moloch, horrid king, besmeared with blood  
 Of human sacrifice, and parents' tears;  
 Though, for the noise of drums and timbrels loud,  
 Their children's cries *unheard*, that passed through fire  
 To his grim idol.

Let us take one more example illustrative of the principle of intonation here laid down:

Art thou that traitor-angel, art thou he  
 Who first broke peace in heaven, and faith, till then  
 Unbroken?

In this passage the phrase 'in heaven' is interposed between peace and faith, the two objectives of broke. Now in order that the syntactic connexion between these words may be impressively shown, the slightest pause only is admissible after 'heaven;' and a more conspicuous one must be placed after 'faith.' But the further expletive 'till then unbroken' is immediately connected with 'faith;' and the only means by which this close relationship can be represented in contravention to the delay of the pause after 'faith,' which was shown to be necessary for another point of perspicuity, is by using the phrase of the rising ditone or the monotone on 'faith.' Thus the pause at this word represents clearly the full government of the verb 'broke,' whilst the phrase of melody at that pause, prevents the intersection of rest, from dissolving the continuity of the previous sense with the succeeding expletive. The pages of poetry are full of instances of phraseology that require the management of the voice here described. Milton and Shakespeare can not be read well, without strict attention to the apparent collision between the purposes of the pause and of the sense, and to the reconciling power of the phrases of melody.

The reduction of the Pitch and Force of the voice being generally combined in reading, I have, in this section, designated them collectively, by a single term,—the Abatement of the voice. Common elementary books are sufficiently explanatory of the nature and uses of this means for exhibiting the sense and sentiment of discourse. Its power of grouping together the related parts of sentences, is shown by the well known mode of utterance in a parenthesis.

I come now to speak of the perspicuity which may be given

to a sentence, by what I have called the Flight of the voice. There is a familiar rule in elocution, which directs us to use a quickened utterance on the common parenthesis. This function may be extended to other grammatical constructions. I give it here the importance of a name, and of a detailed discussion, from the indispensable necessity of employing it, for the clear display of the sense of some of those instances of close trimmed phraseology and extreme inversion, which are occasionally found in the higher species of poetical composition.

In the following example, I have marked, in italics, the part which requires the flight of the voice :

You and I have heard our fathers say  
There was a Brutus once, that would have *brook'd*  
*The eternal Devil to keep his state in Rome*  
As easily, as a king.

The word 'easily,' here qualifies the verb 'brook'd;' and I know no mode of showing this to the auditor, but by the rapid flight here directed. A London edition of Shaskpeare, from which I quote this passage, has a pause after Rome. The rationale of the flight, which lies in allowing the least possible lapse of time between the utterance of related words, suggests the obliteration of this pause, and the addition of a slight one after 'easily.' This tends to prevent the adverb from passing as a qualification of 'keeping his state,' which certainly can not be the sense of the author; but which, at a glance of hearing, might be mistaken for it, without the aid of the altered pause and the flight. This is not the place to speak of the nice points of emphasis and of melody, to be connected with the flight of this passage, in order to give full lustre to its effect.

Say first, for Heaven *hides nothing from thy view,*  
Nor the deep track of hell.

To make it appear at once, in speech, that the 'deep track of hell' is, equally with 'heaven,' a nominative to 'hides,' the phrase of the monotone must be used at 'view,' in addition to the flight of the voice, on the portion marked in italics;—nor should there be a pause at 'view,' as given by the editor.

Should the mere grammarian conceive objections to any of these proposed alterations of punctuation, I must beg him to

recur to the design of this section. We speak now of the means of addressing the ear; and its jealous demands sometimes justify a neglect of the usual temporal pauses, from the sense and expression in these cases being more obvious without them. The art of reading well admits of the resource of compensating for voluntary faults on some points, by the accomplishment of eminent effects on the others.

By the grouping of Emphasis, or what I here call the Emphatic Tie, I mean the application of emphasis to words, which would not otherwise require distinction, merely for the purpose of associating those ideas which can not, by any other mode of vocal syntax, if I may so speak, be brought together, or exhibited in their natural grammatical dependence. The process of this function may be easily understood: for related words, however disjoined in composition, are at once brought within the field of hearing, in their real relationships, whenever they are raised into attractive importance, by force or any other kind of emphasis.

The following stanza, from Collins' 'Ode on the Passions,' will illustrate the nature of this mode of grouping.

When Cheerfulness, a nymph of healthiest hue,  
Her bow across her shoulder flung,  
Her buskins gemm'd with morning dew,  
Blew an *inspiring air*, that dale and thicket rung,  
The hunter's *call*, to Faun and Dryad known.

These two last lines have an embarrassing construction to a reader. The phrases 'inspiring air,' and 'hunter's call' are in apposition; but there intervenes a clause, which might make 'rung' pass for an active, instead of a neuter verb, and thereby render 'call' the objective to it. To show, therefore, that by 'hunter's call' the author means the 'inspiring air,' previously mentioned, the words marked in italics should receive strong emphasis. This is the best mode for restoring to the ear that natural order which is inverted in the composition.

This emphatic tie is often employed in combination with other of the means of grouping. Thus, in the several examples, illustrating the use of the phrases of melody, their influence will be assisted by applying the connecting emphasis to 'comet' and 'fires'—'children's' and 'passed'—'peace' and 'faith.' In the examples of the flight, the relationships between



the words 'brook'd' and 'easily'—and between 'heaven' and 'deep track of hell,' will be made more manifest by the additional use of the emphatic tie.

In short, it is sometimes necessary to employ all the means of grouping upon a single sentence, in order to make the syntax and the sentiment obvious to the ear. The extreme distortion of English-idiom in the following lines, must be exceedingly perplexing to a reader; and, so far as I know, can be rendered somewhat less embarrassing, only by the use of all these means. The passage is taken from the fourth book of *Paradise Lost*, at the end of Satan's address to the sun.

Thus while he spake, each passion dimm'd his face  
Thrice chang'd with pale, ire, envy, and despair;  
Which marr'd his borrow'd visage, and betray'd  
Him counterfeit, if any eye beheld.

Milton uses the word 'pale,' here, and at least in one other place of his poem, as a substantive. Its common adjective-meaning tends to throw some confusion into the sentence. 'Ire, envy, and despair,' are in apposition with passion, and are severally concordant with the distributive pronoun 'each.' Now the only manner in which I can approximate towards a clear representation of this blameable piece of latinity, is by making a quick flight over the portion 'dimm'd his face thrice changed with pale,' and by an abatement thereon; by laying a strong emphasis on 'each passion,' and on 'ire, envy, and despair;' and by applying the phrase of the rising ditone, with a marked temporal pause, at 'pale.'

After all, it is a hard picture to paint for a taste that will have true colors—well laid on.

In the present section, and in the two preceding, we have been occupied, more by considering the audible means of displaying the *sense* of discourse, than by pointing out the signs of *expression*. But the delineation of sense must, in all cases, be co-existent with the representation of what is distinctively called sentiment.

In this section, and in other parts of this essay, I have been induced to select examples for illustration, from the prime works of poetry; inasmuch as the strength and variety of their execution, afford the widest field for the use of the re-

markable functions of speech ; and because I am persuaded, that if the principles which I am endeavouring to establish, be comprehended by the reader, he will have no difficulty in applying them to the less intricate modes of prose. Yet I must again repeat, that I have taken upon myself the part of a physiologist, not of a rhetorician.



### SECTION XIII.

#### *Of the Interval of the Octave.*

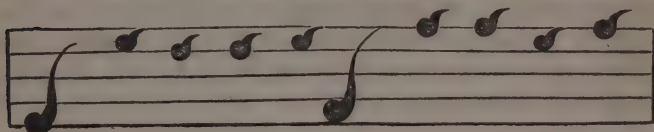
IN the foregoing history of expression, the part performed by the variations of Pitch was described, only as it appears in the radical and vanishing movement, through the interval of a single tone.

In speaking of the diatonic use of the concrete, and of its progress in the melody of simple narrative, it was said that the vanish never rises above the interval of a tone ; and that the variations of the radical pitch, whether upwards or downwards, never exceed the limits of this same interval. Now such unpassionate narrative as was then supposed, is rarely found of any continuance : but the mode and occasions of the exceptions having been reserved for future explanation, I avoided confusing the subject then in hand, by restrictive remarks, which could not have been understood without much digressive explanation. The wider intervals of pitch which are used for expression, are now to be described.

By the term Octave, which is set at the head of this section, is meant the concrete rise of the voice, from any assumed place, through superior parts of the scale, until it ends or vanishes in the eighth degree, or in the octave to that radical at which it began. This concrete interval is employed for the expression of interrogation ; and it is further used as one of the

means for distinguishing words, by the function which is called emphasis. The octave is not limited to those phrases alone which carry the common grammatical notation of a question. There are some declaratory sentences which are made interrogative, by intonation; and there are many occasions in discourse, on which the sentiments of the speaker are so nearly poised between certainty and doubt, that he admits, by an interrogative movement, the hesitation of inquiry, in the very confidence of assertion. The octave being the widest interval of the speaking scale, is significant of the greatest vehemence or earnestness of an interrogative sense. It is likewise the appropriate mode of intonation, if the question is accompanied with sneer, contempt, mirth, raillery, and the temper or triumph of quick and of peevish argument.

From the time required in drawing out the interval of an octave, it must be obvious, that this mode of interrogation can be executed conspicuously, only on a syllable capable of prolongation—How then can the interrogative expression be given on a short and immutable syllable? The process by which this is done, will be described hereafter, with particular reference to interrogative sentences. It may be here transiently illustrated by the following notation :—



In this scheme, it is visible that the discrete change or skip is made from the radical line of the concrete octave, to a line along the height of the vanish of that same octave. Now immutable syllables, in an interrogative sentence, are transferred by radical change to the summit of the concrete interrogative interval, and thus discretely produce the expressive effect of that interval, though less remarkably than the indefinite syllables which pass through the concrete rise. As there are more short syllables than long ones in most sentences, the discrete change, as here exhibited, must be the predominating mode of interrogative intonation. The above scheme shows further, that after the radical pitch has assumed the line of the

vanishing octave, the voice proceeds in the diatonic melody on that line, until the occurrence of a syllable which requires and will bear the concrete rise; then the radical pitch descends to form a new octave concrete. Thus it appears, that the rule of intonation, laid down when speaking of the diatonic melody of simple narration, does not apply to the melody of interrogative sentences; for these employ a more extended concrete interval, and a wider discrete transition in their changes of radical pitch.

When the octave is used for the purpose of emphasis, the voice immediately descends after its concrete rise on the emphatic word, to the original line of radical pitch, as in the following notation :



But this matter of emphasis is to be treated more particularly, and to be illustrated hereafter.

I have to remark finally, on the use of the concrete octave and its radical change, as the means of interrogative and emphatic expression, that as this highest interval of the scale is employed for the most earnest degrees of these purposes, it is of less frequent occurrence in speech, than the following intervals of the fifth and the third.



## SECTION XIV.

*Of the Interval of the Fifth.*

THE radical and vanishing Fifth, like the octave, is used for interrogation and for emphasis ; but has, however, less of the smart inquisitiveness which is implied by this last interval. It is the most common mode of interrogative intonation ; and may convey a question with sentiments of wonder and admiration. It has none of the flippancy of the octave ; is equally capable of energy, and is always more dignified in its appeal. The explanatory remarks in the last section, on the subject of the change of radical pitch, in interrogation and emphasis, apply to the like uses of the fifth. That is, in interrogative sentences, after the voice has made a discrete change by radical pitch, through the interval of a fifth, the succeeding melody may continue at its elevation, till again brought down for the purpose of a new concrete rise : and after the use of the fifth for emphatic distinction on a single word, the pitch immediately returns to the original line of the current melody.

From the preceding account of the intonation of the octave and of the fifth, we learn that their effects are cognizable under two different modes—the concrete rise, and the radical change ; that the former of these modes is impressed more remarkably on the ear ; and that the distinction between the interrogative and emphatic use of these intervals, consists in the difference of the number of syllables, to which these intervals are applied.

It was said that the intonation of the octave, whether by concrete or by radical pitch, is rarely employed ; since a rise of eight notes above the ordinary line of utterance carries most speakers into the falsette. And even with those in whom the rise might not exceed the natural voice, the melody when suddenly changed to that height would often be ludicrous, from contrast ; or would be in danger of breaking into the falsette in its variations ; or would be beyond the limits of the speaker's skillful execution. These objections do not ap-

ply to an occasional use of radical pitch through the ascent of the fifth ; the variation being less striking in contrast, and the interval of a fifth above the common range of the voice being rarely beyond practicable management.

Besides the above described uses of the octave and fifth, there are, in common life, some cant modes of exclamation, and other familiar and vulgar voices which are made on these intervals. I omit further notice of them.



## SECTION XV.

### *Of the Interval of the Third.*

THE concrete Third, like the two last named intervals, is used in asking a question, and in the intonation of emphasis. But the strength of its indication is less than the fifth. It is merely the sign of simple interrogation, in its most moderate degree ; and carries with it none of those sentiments which, jointly with the question, were allotted to those other movements.

Besides the exceptions to the rule of the plain diatonic melody, in the use of the octave and fifth, it must now be added, that the general current of the tone is further varied, by the introduction of the interval of the concrete third, and by the change of radical pitch through the extent of this interval. It is more frequently used than either of the two former ; for, although it is more rarely employed than the fifth, in interrogation, it is the most common form of emphatic intonation. In pointing out the phrases of melody, it was said, that the rising tritone, or upward succession of three radicals, on as many syllables, is occasionally employed. Now by the nature of the scale, three radical places contain the interval of a third : it is therefore the union of the constituents of a tritone, rejecting

the vanish of the last, that makes the proper concrete third. This concrete as regards interrogative effect, is more impressive than the discrete rise of the radicals ; for if the phrase ‘Go you there,’ be uttered with the rising tritone, or one syllable successively a tone in its radical pitch above the preceding, with a downward vanish on each, it will have the character of an imperative sentence. But if the first word should move through the space of the tritone by a concrete rise, and the two others should be uttered at the top of that concrete, the effect would be interrogative, notwithstanding both might bear the downward vanish.—The same would be the case if the second word had the concrete, and the last the radical change ; or, if the two former were to have the common diatonic melody, and the last alone the concrete rise. These would be the different processes for effecting the interrogative expression, according as the sense might require the emphasis on different words.

There is a mode of replication in common speech, especially used by the Scots, consisting of a repetition of the affirmative *yes*, or *aye*, in the radical and vanishing third ; and whilst the words seem to pay the courtesy of assent, the interrogative nature of the intonation still insinuates the hesitation of doubt or surprise. Should the sentiment which dictates these words be of unusual energy, the expression will assume the form of the fifth, or octave.

When the reader will hereafter have acquired the prefatory knowledge which is necessary for the full comprehension of the nature of emphasis, it will be definitely explained, in what manner and on what occasions the octave, the fifth, and the third, are employed, in this important function of correct and impressive speech. But it may belong to this place to remark, that as the emphasis which is given to the prominent words of concessive, conditional, and hypothetical sentences, carries with it, in a measure, the latent sentiment of an interrogatory, its application may properly be illustrated here. The following examples of conditionality and concession, call for a high interval on the words marked in italics.

Then when I am thy *captive* talk of chains,  
Proud liminary Cherub ! but ere then,

Far heavier load thyself expect to feel  
 From my prevailing arm, though *Heaven's king*  
 Ride on thy wings.

So in the hypothesis of the following sentence :

—— If I *must contend*, said he,  
 Best with the best, the sender, not the sent.

And the same with the exceptive phrase marked in these lines :

The undaunted fiend what this might be, admired;  
 Admired, not fear'd. God and his Son *except*,  
 Created thing naught valued he, nor shunn'd.

It is not the purpose to decide here, which of the high intervals is to be set respectively on the strong words of these examples. The citations were made, merely to show that the third or fifth, or octave, may be used on the emphatic syllables of such sentences.

The interval of the minor third, as we have seen in the first section, consists of one tone and a half. It has a plaintive expression, and is not, as far as I have observed, employed for any of those purposes of interrogation, conditionality or concession, which are here ascribed to the major third. The rare occasions of its use in speech will be mentioned hereafter.

It may perhaps be useful, in this place, for the reader to take a retrospect over the subject of melody, as it has thus far been described; and to look upon it as consisting of the diatonic phrases formerly enumerated, varied by the occasional introduction of the higher intervals of the octave, fifth, and third. In speaking of the melody of simple narrative, the radical changes of that style were reduced to seven elementary forms. It may be thought that the further use of these higher intervals, in the transitions of pitch, justifies an additional nomenclature, for the phrases which are employed in expression. It does so; and the phrase of the eighth, of the fifth, and of the third, when the transition is made by the radical skip, are the terms by which these new forms of melodial progression in speech may be respectively designated.



## SECTION XVI.

*Of the Intonation of Interrogative Sentences.*

HAVING ascribed the powers of interrogation to the octave and fifth and third, I defer, for a moment, the history of the remaining elements of pitch, in order to point out the mode of employing those intervals, in the course of an interrogative sentence; that we may thereby learn how they are related both to its current melody and cadence.

With a view to exhibit the forceful effect of the interrogative intervals, when unsupported by those grammatical constructions which generally indicate a question, let us take the following sentence:

Give Brutus a statue with his ancestors.

This sentence is significant of an intention to honor the patriot, and is imperative in that purpose. But if the versatile plebeian should, the next moment, have a new light of discernment, he might deny the tribute, by repeating the very words of the decree, with the sneering intonation of a question—

Give Brutus a statue with his ancestors?

The different modes of the voice in these two instances, would be perceptible to every hearer: nor could the altered intention of the speaker, in the last case, be mistaken. The conspicuous effect of this line, when read in the latter way, proceeds from the use of the rising interval of the fifth on each of the syllables; and it shows the power of that rise in changing an imperative to an interrogative expression. I say, the interval is used either concretely or by a radical change, on each syllable of the sentence. In this way the question is completely and strongly conveyed; for should the fifth be employed upon every word except the last, and should this be

uttered with the diatonic triad, the expression of the sneer will be lost. If the interrogative effect be given to the last word, and omitted on the others, it will, in some degree, denote an inquiry; but much less forcibly than when the intonation is applied to every syllable. The preceding examples were given, merely to show the effect of the higher intervals when compared with the simple concrete of the tone or second in a diatonic melody. A description of the manner of applying these intervals, for the purposes of interrogation, is reserved for an approaching page.

Before we enter on this proposed analysis, the purposes of elementary instruction require some notice of the different degrees of the interrogative expression; since some sentences demand its employment on every syllable, whilst others are fully significative of the question by its partial application. But to be more definite:

By the term Thorough interrogative expression, I mean the use of the intended interval on every syllable of the sentence:

By Partial interrogative expression—the use of the interval on one or a few syllables; others, and particularly those at the close, having the melody of plain declarative discourse.

The proper reading of the questions contained in the following selections, may serve to illustrate the nature of the above named divisions. When Clarence enters guarded, at the end of the opening soliloquy of *King Richard III*, Gloster thus addresses him:—

Brother, good day! what means this armed guard  
That waits upon your grace?

Here the interrogative intonation is heard only on parts of the clause, *what means this armed guard*; the rest of the sentence has both the current and cadence of the diatonic melody.

When the queen, in the third scene of the first act, says:

By Heaven, I will acquaint his majesty  
Of those gross taunts I often have endured.

Gloster retorts:

What! threat you me with telling of the king?

This proud and angry question must have the interrogative

intonation throughout its current, with the unfinished rising at the close, or it will not express the spirit of the speaker.

As the characteristic mode in each of these questions can not be interchangeably transferred, and as every question has either an appointed universality or a restriction, in the degree of its expression, it is a necessary inference, that some directive principles must be operative on good readers, where such can be found, in designating the places and marking the limits of this expression. I have only transiently investigated this curious subject of speech. The result of my observation persuades me, that the subject itself is not beyond the purpose of this essay ; though I have not, at present, time nor need to make this matter extended in detail, and satisfactory in system. I therefore beg the reader to receive the following remarks, as suggestions upon points of inquiry ; and as proposals, which will be submissive under correction, and revocable before the influence of a broader view, and a more discriminating analysis.

If I perceive rightly the relationship between the intonation, and the words of a question, the circumstances which direct the thorough and the partial use of expression, arise out of the following conditions of the form and spirit of the phraseology.

Sentences are employed with an interrogative intention, under various modes of construction. They are framed assertively, and derive the power of a question solely from intonation : or they are made by the reversed position of the natural order of the nominative and verb : or by joining certain pronouns or adverbs with the preceding condition : or they are of a positive or negative texture : or they may embrace expletive or assertive clauses, in connexion with the phrase containing the point of the question : or they may include two or more questions connected by a copulative or disjunctive conjunction : or finally, two or more interrogative sentences may separately succeed each other in series.

With respect to the sentiment or spirit of the phrase, an inquiry may be grounded on the real ignorance or doubt of the interrogator : or it may intimate a knowledge of the subject ; nay, in an extension of this condition, a question is sometimes put as a triumphant mode of assertion. Interrogations may be urged with great earnestness, or addressed in a moderate temper ; they may be made with surprise or scorn or exultation.

These are some of the varieties under which interrogative sentences appear. I exclude from this view, all those interjective clauses and appealing exclamations which editors frequently mark with a note of interrogation.

If we try the experiment of utterance, in the various cases above mentioned, we may be able to deduce some general rules on this subject; or furnish approximations towards them, for the assistance of future researches. Let us make the attempt.

It may be laid down as a rule, without an exception, that where an interrogative sentence has the assertive construction, it requires the Thorough expression. In addition to an example of this case, given in a preceding page, I here offer an illustration from *Coriolanus*, in which the same words are used as a declarative and as an interrogative phrase. In the fifth scene of the fourth act, the servant of Aufidius says to Coriolanus—

Where dwellest thou?

*Cor.* Under the canopy.

*Ser.* *Under the canopy?*

*Cor.* Ay.

*Ser.* Where's that?

*Cor.* In the city of kites and crows.

*Ser.* *In the city of kites and crows?*

The replications here set in italics should be read with the interrogative interval on every syllable; and the reason is obvious. All assertive sentences, when meant interrogatively, are elliptical. Thus the speaker here means either with inquisitive doubt,—‘Did you say under the canopy’—or with real inquiry,—‘Where is under the canopy.’—And so of the other instance. But the grammatical sign of the question being omitted in these cases, it is necessary to supply the defect of the elipsis, by the use of the thorough interrogative intonation. For if the interrogative interval be applied exclusively to any one of the words or syllables, except the last, it will constitute a mere declaration, with an emphasis on the word so marked. If it be set on many syllables, or on all except one, it will indeed produce something of an interrogative effect, but quite unsatisfactory to the demands of the sense and the ear in this case. Should the expression be made on the last, while the other words run in the diatonic melody, the reading will fall



short of the meaning of the phrase, if it should not, indeed, misrepresent it : since the unexpected rise at the close, instead of the consistent termination by the cadence, will produce an anomaly of utterance irreducible, by me at least, to any design of expression.

When a sentence is constructed with the interrogative pronouns or adverbs, and embraces none of those sentiments which, I am presently about to say, call for the Thorough expression, it commonly appears under the Partial form. Some of the exceptions to the generality of this rule will be mentioned, in speaking of the varying sentiments of an interrogative phrase, and of its final emphatic syllable.

When the question is made by the nominative being placed after the verb or auxiliary, either the Partial or the Thorough intonation is employed. I need not illustrate the varieties of this case : the reader can readily recur to examples under it ; in which the propriety of a choice from diverse modes of intonation, must be determined by the nature of the sentiment, the place or places of the emphasis, and the form of the sentence, whether it is short and simple, or extended and complex.

Questions constructed with pronouns or adverbs, or with the reversed nominative, are made directly to the point of inquiry, or indirectly by a negative, to its opposite. The intonation of such questions has the Thorough or Partial expression, according to the spirit or the emphasis of the sentence. The reader may run over the dialogue of the drama and find examples enough for the proof or correction of what is said on this point.

When a sentence, besides the point of the question, has additional members or phrases which contain an address to a person, or assertions, or expletives, or causes, the expression assumes the partial form, as in the following instances :

Of address :

Why with some little train, my lord of Buckingham ?

Of assertion :

Why did you laugh then, when I said, Man delights not me ?

Of expletive :

What's Hecuba to him, or he to Hecuba,  
That he should weep for her?

Of cause :

What of his heart perceive you in his face,  
By any likelihood he showed to day?

The reason of the rule seems to be here—that the additional clauses though modifying in some degree the leading point of the question, yet do not, in their separable membership, carry an interrogation, which that portion of the sentence, called here the point of the question, does.

When two or more questions of moderate temper are connected by conjunctions, or when without this union by particles, they succeed in series, it is not necessary that each question should severally have the degree of interrogative expression which its solitary use might require.

Give me thy hand. Thus high, by thy advice,  
And thy assistance, is king Richard seated:—  
But shall we wear these glories for a day?  
Or shall they last, and we rejoice in them?

---

Are you call'd forth from out a world of men,  
To slay the innocent? What is my offence?  
Where is the evidence that doth accuse me?  
What lawful quest have given their verdict up  
Unto the frowning judge? or who pronounced  
The bitter sentence of poor Clarence's death?

If this rule is not contravened by conditions which require universally the thorough expression, the question, in such instances as the above, is sometimes sufficiently marked, if some of the constituents of the series carry an interrogative interval on a single word; which reduces the expression to the state of a declarative sentence, having an emphatic word, so signalized by the given interval. Perhaps the reason of the rule may lie in this:—when the mind or ear of the auditor is in the humour of the question, if I may so speak, the interrogation is sufficiently indicated by the grammatical construction of the sentence.

With respect to the sentiment or the spirit of an interrogation, there are some notable properties which seem to govern the use of intonation.

When the question is prompted by the ignorance or uncertainty of the speaker, and thus contains a real inquiry, it generally bears the thorough expression; which must consequently, in many instances, overrule the formulæ for the partial intonation of sentences constructed with pronouns or adverbs, or with the inverted position of the nominative case, and of sentences in conjunction or series.

*Hamlet.* Dost thou hear me old friend?  
Can you play the murder of Gonzago?

---

*Prospero.* Thy father was the duke of Milan, and  
A prince of power.

*Miranda.* Sir are not you my father?

Although in the stated form of this rule, I have ascribed to it only a general operation, yet, when the question is made with much earnestness, its bearing is universal.

The intonation appropriated to those questions which are made argumentatively, or in the way of a confident appeal, varies from the full thorough application, through all the degrees of its partial use, to the very opposite expression of the most positive declaratory sentence: But of the appealing interrogation I shall speak hereafter.

When a question is vehemently made, under any mode of construction of the sentence, and with any number of such questions, either in conjunction or in series, the rule may be received as very general, which assigns to the expression the thorough extent.

Show me what thou'lt do!  
Woo't weep? woo't fight? woo't fast? woo't tear thyself?  
Woo't drink up Esil? eat a crocodile?  
I'll do't. Dost thou come here to whine?  
To outface me with leaping in her grave?

The reader may find full illustration of this rule, by turning to Shylock's noted parallel between the Jew and the Christian, with his earnest resolve upon revenge—in the first scene of the third act of the *Merchant of Venice*.

If a question be addressed in a moderate temper of inquiry, the speaker will generally affect the partial mode of expression. When Hamlet says to Guildenstern,

Will you play on this pipe?

the composure of mind, and the rank of the prince, mingle in the question the mild authority of a request, with the doubt of an inquiry; and this is perhaps properly represented by the use of the interrogative intonation on the first part of the sentence, with a subsequent reposing descent of the diatonic cadence. It is true, the instrument is brought into the scene, and the question is thereupon put, with a view to the consequent quibble; and on this ground, perhaps, the word *pipe* might be regarded as emphatic. Still the emphasis may be made by a stress or force of voice on the last constituent of the triad, as well as by the ascent of the interrogative interval.

When a question is made with surprise, indignation, scorn, and other emotions of a similar spirit, it generally receives the thorough expression. I can not transcribe from the first act of *Hamlet*, so much as it furnishes to illustrate the influence of wonder, on the intonation of a question. But if the reader will turn to the scene between Hamlet, Horatio, and the two officers, he will find, that from the moment Horatio informs Hamlet of his having seen his father, there follows, on the part of the prince, a succession of questions, with both the declaratory and interrogative construction, most of which require a marked use of the thorough expression. With like earnestness, Cleopatra, in the play which bears her name with Antony's, says to Proculeius, the friend of Cæsar,

Know sir, that I  
Will not wait pinioned at your master's court—  
Nor once be chastised with the sober eye  
Of dull Octavia. *Shall they hoist me up,*  
*And show me to the shouting varletry*  
*Of censuring Rome?* Rather a ditch in Ægypt  
Be gentle grave unto me.

The repulsive indignation of this question can not be fairly painted without the fullest measure of interrogative coloring.

When the last syllable of a question is emphatic, and its intonation is not forcibly directed to the partial expression, by



some one of the preceding rules, particularly by that which concerns the series, this last syllable bears the interrogative interval. Should the sentence be short, or consist of a single member, the expression will have a thorough application. In the dialogue between the murderers of Clarence, the second speaker exclaims and asks,—

What! shall we stab him as he sleeps?

From the answer of his companion, it is plain that the question points at the act of sleeping, and this produces an interrogative emphasis on the last word. Had the inquiry been whether the victim should be stabbed or strangled, the word 'stab' would carry the emphatic intonation, and the sentence might end with the diatonic cadence.

It will be shown, in a future section on exclamatory sentences, that many phrases having the grammatical construction of a question, and containing other and stronger sentiments that overrule the interrogative intonation, are not properly expressed by rising intervals, but by the contrary movements of pitch.

Having thus endeavoured to bring the subject of interrogative sentences, as regards the entire or the partial application of their expressive intonation into something like a systematic form, I must leave the correction of the errors of the effort, and the amplifying of its approved hints, as a work for the better ear and closer attention of others.

Let us now proceed to consider more particularly the manner in which the interrogative intervals are applied to individual syllables.

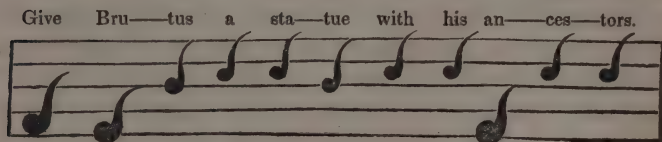
As prefatory to this investigation I must here make some remarks on the use of the radical and vanishing movement, when applied to short and immutable syllables. I formerly suggested the modes of trial, by which the existence of the various concretes might be exemplified on long quantities: and I likewise asserted that no syllable could be uttered without passing through the radical and vanish, under some form of intonation. We have now reached a point in our subject, at which the reader may receive the proof of this assertion, as respects the equable concrete of speech.

I must suppose that the reader is familiar with the effect of

the concrete rise through a third or fifth or octave which constitutes interrogative expression. Now let him take the immutable syllable, 'top,' which is one of the shortest in the language, and pronounce it as a mere sound, without meaning or sentiment. Again, let him utter it as a question: and he will perceive that with whatever rapidity it may be pronounced, he can still accomplish, on it, the peculiar effect of interrogative intonation. There is therefore in the last experiment some accident of the voice which is not heard in the first. The distinction between the two cases arises solely from the use of a wider transit of the concrete progress in the latter. For it may be readily shown that it does not proceed from any peculiarity in the quality, nor from a certain degree in the force of the voice: and that it is not produced solely by a change of the syllable to a high place of pitch, without its concrete movement, may be ascertained by the following experiment. Let the reader, rise through the musical scale by repeating the word 'top,' taking care to give it no more than the radical and vanish of a second at each degree: he will perceive that to whatever height he ascends, the interrogative intonation will not be produced. Now I know not to what this intonation, when heard on an immutable syllable, is to be ascribed, if not to a rapid flight of the voice, through a concrete interrogative interval. The audible effect justifies the conclusion; though the succession of time, and of space on the scale, which is so distinctly perceptible in the movement of the slower concrete, is in this case of the immutable syllable, altogether beyond my power of measurement.

It will appear in the trials above proposed, that the interrogative effect is producible on the shortest syllables: and such experiments will warrant the general conclusion, that every interval of the scale is practicable on every syllable in speech. But it is to be remarked that the use of the wider intervals on short syllables, when compared with their application to long and indefinite ones, has a feebleness of interrogative expression directly proportional to the rapidity of their flight; and consequently that the long and distinctly measurable concrete on indefinite syllables produces the strongest expression of interrogation. It is desirable, however, that the thorough expression should be equally diffused: and as all syllables are not by

length qualified to bear the slow and most eminent interrogative concrete, it follows that other means, besides those already described, must be employed on short syllables, for the purpose of fulfilling strongly and uniformly the intonation of a question. The means for strengthening the comparative feebleness of interrogative expression on short syllables, consists in raising them, by the change of radical pitch, to the line of the summit of the slow concretes which are allotted to the indefinite quantities in a sentence; as the following notation of a case of thorough expression will exemplify :



In this scheme the interrogative intonation is made by the fifth on every syllable. To the two first, which are indefinite and emphatic, the slow concrete is applied. On the third, which is short, and therefore can not bear the slow concrete, the momentary rapid movement through the fifth takes place, whilst at the same time it is transferred by radical change, to the height of the preceding vanish. The melody continues at this height on all the following syllables, which are unemphatic, or which if emphatic (as may be said of 'stat') are of immutable quantity. At the indefinite syllable 'an' the radical pitch descends, for the purpose of rising on that syllable by the slow concrete : and the two final short quantities terminate the melody by the radical change and the rapid vanish.

It is by this method then,—the union of a radical change with the rapid concrete, that a full and forcible power of interrogative intonation is given to those syllables which are too short to admit of the slower and more measurable movement.

If the reader would be better satisfied, as to the execution of this function of the radical change, and the perception of its effect, through an exemplification on a single word, let him deliberately pronounce the noun 'convict,' as if it were an

earnest question. The syllable 'con' being an indefinite quantity, and emphatic, will be distinctly heard to rise concretely from a given point of pitch, to the place of the fifth or octave, according to the earnestness of the expression: and the immutable syllable 'vict,' will be heard at the height of that previous vanish. If 'vict' be kept down at the level of the radical of 'con,' and if it be there uttered, with the rapid concrete rise, carefully guarding against the descent to a close, the interrogative effect will indeed still be perceptible, but in a degree far inferior to the keen questioning of the former mode of intonation.

It is not difficult to assign the reason why the interrogative effect of the rapid concrete is enhanced, by its being taken on the higher places of the scale. For the rise by the slow concrete, is after all, but a peculiar mode of change from a low to a high pitch: and though that peculiar continuous mode is plainly distinguishable, in its degree of expression, from a discrete ascent to the same height, still an essential though not the exclusive power of the former function, is, its designating that higher place. Now this power is the sole efficient in the radical change; and like two discrete notes on a musical instrument, when heard in immediate succession as the extremes of a wide interval of the scale, it does produce an effect closely resembling that which arises from a concrete transition of sound between the same extremes. If to this effect of the radical change, be added the coincident and co-operating expression of the rapid concrete, the combined effects become equivalent to that interrogative expression which is given by the longer concrete on an indefinite syllable.

As the rapid concrete on a short syllable, whether it be emphatic or not, does, however moderately, produce an interrogative impression, it may be used, without the radical change, in those cases which do not require a strongly marked intonation of the question. That is, all the interrogative syllables of sentences which bear the partial expression, (for a thorough expression is generally forcible,) may be kept at about the same line of radical pitch. But the syllables so disposed must still perform their rapid concrete in the appropriate interrogative interval: and it will generally be found that the moderate



temper of such questions receives the abated expression which was ascribed to the Third, in the history of that interval.

Besides that certain succession of radical change which has been noted and explained, there is this other mode, in the application of the general principle of its construction. If the first part of a sentence should consist of short quantities, which resist extension through the slow concrete, the interrogative expression may be made, by the voice setting out at once on the high pitch, and descending afterwards at the first emphatic syllable of long quantity, which will bear the slow concrete. Thus, if we take the two first symbols of intonation from the preceding example, and set over the remaining notation, the following phrase, as an earnest question :

Pitt a statue with his ancestors?

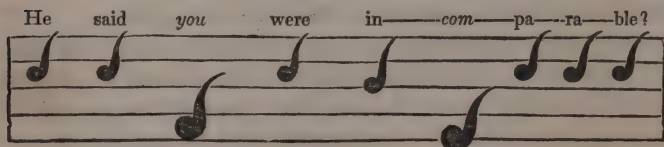
the reading will have the just interrogative expression.

Perhaps the reader is now prepared to understand me when I say generally, That the current melody of interrogation, in those sentences which require the Thorough expression, is made by the use of the slow concrete interval of the third or fifth or octave, on the long and emphatic syllables ; and by a change of radical pitch, together with the rapid concrete of the same interval, on those which are short and unemphatic or unaccented : that in those sentences which are restricted to the Partial expression, the intonation is made by a similar use of the above named interrogative intervals, in connexion with the phrases of the common diatonic melody : and that in both these cases of a Thorough and a Partial extent of expression, the interrogation may be constituted solely by the Third, or the Fifth, or the Octave ; or more than one of these intervals may be used in the same sentence, accordingly as the emphatic force and the sentiment of the several words require, on the one hand, the same expression, and on the other, an appropriation of the peculiar powers of the different intervals to the varying demands of those words.

Let us now learn the mode of constructing the cadence of interrogative sentences : or, as some of these sentences have not that peculiar characteristic of close or discontinuation which belongs to the cadence strictly so called, let us learn the the manner of intonation on their three final syllables.

If a sentence bears the Thorough expression, the close is made in one of the following ways.

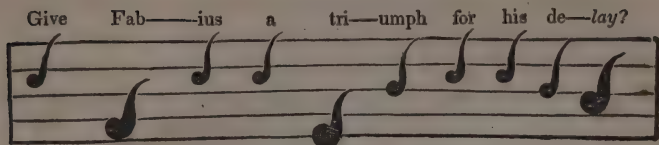
When the three last syllables are unemphatic, or immutable, or are the unaccented syllables of an emphatic word, the interrogative effect is produced by a radical change and rapid concrete of these three final syllables: these syllables, in their exalted pitch being carried on in the phrase of the monotone or rising ditone. For since the interrogative expression should always create that perception of continuity which is contradistinguished in character from the close of the Triad, the above named phrases do add their peculiar power, in this respect, to that of the rapid concrete, in order to give the required continuation of the voice at the end of the sentence. This species of close is exemplified in the ensuing notation :



The same case of Thorough expression being supposed : if the antepenultimate syllable is emphatic, and of indefinite quantity, it assumes the slow concrete, and the two last take on the radical change and the rapid concrete ; as shown by the notation of the word ‘ancestors’ in a preceding example.

If, in a like case, the penult be a long quantity, it will rise by the slow concrete ; and the last will have the rapid movement with the radical change. This mode of intonation may be well understood without a notation of it ; and I here take occasion to remark that it will be unnecessary to annex an illustration by the staff, to all the succeeding descriptions within the present subject.

If the last syllable of a sentence which bears the thorough expression, be emphatic and capable of the slow concrete, it will end with that continuative interval. Under this condition the three last syllables may go through the downward tritone, as in the following scheme :



In such instances the final rise of the octave, fifth or third, as the case may be, will create the perception of continuity, and thus counteract the tendency of the radical descent, through three successive downward tones, to produce a close: for it is a condition of the cadence, that the vanish of its last concrete should be a downward intonation.

When the expression is Partial, and when the last clause of the sentence does not bear it, it is obvious that the melody of that clause must be of the common diatonic species, and should therefore terminate with the appropriate triad. But sentences with the partial expression sometimes have one of the three final syllables emphatic: in which case the emphatic syllable may call for the interrogative expression. Under this condition the following will be the forms of the cadence.

If the antepenultimate syllable be emphatic, and indefinite, it will bear the slow concrete interval; and the two last will successively descend from the radical of that concrete, and form with it, a proper diatonic triad.

If the penult be emphatic and bear the slow concrete, the last syllable will have its radical pitch a tone below that of the preceding, and by its downward vanish will produce the close of the triad; the emphatic syllable which bears the interrogative intonation, being in its radical pitch, a tone below the antepenultimate. This mode, however, is not common: for if the expression by the concrete interval comes so near the close, it is generally continued, by the last syllable taking the radical change.

When the last syllable is emphatic and of indefinite time, the cadence is made in the same manner with that of the last instance, in the preceding account of thorough expression.

The history here given of interrogative intonation embraces some leading points of its use in speech. I leave the discovery of more particular phenomena, and the exhibition of the reason

and rule of their variety, for the observation of others. Upon some future extension of the principles of this work to the universal practice of speech, the subject of interrogative intonation will form a chapter of full and precise specification. I think I see its unsorted materials; but have not time to gather in, to disentangle, to harmonize, to combine, and complete. What is here done may seem to be too much. For the present age, I believe it is. But this is a concession altogether irrelative to the progress of knowledge, and to the pleasure we derive from its development. A novel history of nature, in the dignified confidence of even its humble contributions, no more asks the favor of those who read, than nature herself asks the gratitude of those who enjoy her bounties. She gives what she gives for her own purposes, without distracting her self-energized dispensations, by the subordinate and humanly contrived spring of expected approbation. The true and independent history of nature should be in all things but the image of her; and perhaps he would both do and enjoy more, in the work of discovering and describing her, who could catch a portion of the unostentatious spirit with which she bestows, and who could put on some of her indifference, to the thoughtless praise or blame of those who receive.



## SECTION XVII.

### *Of the Interval of the Second.*

I return from the foregoing account of the use of the higher intervals of pitch, in the construction of interrogative melody, to the enumeration and description of other intervals of more limited extent, but of no less essential efficacy in the scale of intonation.



The rising interval of the second, or the proper radical and vanishing *tone*, has in previous parts of this essay been largely spoken of, both as regards its nature and position in speech. I here reconsider the subject of this interval, with a view to complete the enumeration of all the concrete spaces of the speaking scale: and to join one or two additional remarks to the recapitulation of its qualities and uses. It is the basis of what I have called the diatonic melody; and in correct and agreeable elocution, is more frequently used than any other interval: since it is appropriate to all those parts of discourse which convey the plain thoughts of the speaker; if these may be contradistinguished from those emphatic meanings and sentiments, which I designed to embrace under the head of Expression. Although I thus exclude the Tone, when used in its simplest state, from among the especial agents of expression, I shall show hereafter, that it may receive a stress on different parts of its concrete course, which gives a marked coloring to its intonation: and it has already been told, in the section on Time, that an extension of the voice on syllables of long quantity, produces a deliberate enunciation, a dignity and a smoothness which give the highest qualities of the diatonic melody, without a departure from its characteristic simplicity.

In an early part of this essay, I asserted that the radical and vanish are necessary functions of utterance; or in other words, that no impulse of the voice can be given, without going through the concrete. I have since shown the means for ascertaining the passage of this concrete through the higher intervals of the scale, both in the protracted and the rapid time of syllables. When I assert that immutable syllables, in a diatonic melody, do pass instantaneously through the concrete second or tone, I am bound to confess that my ear can not measure directly the fluent course of the transition. Yet I am led to the conclusion that the fact is so, by the following considerations:—

Every case of concrete utterance of a tone, in which the increments of time and motion are perceptible, has manifestly the radical and vanishing progression. Now when the time of this manifest concrete is gradually shortened, in repeated pronunciation, till the syllabic impulse becomes, as it were, a mere point of sound, the effect of this instant impulse on the

ear does not differ materially from that of the last degree in which the increments of the concrete progress are discernible.

But further, I have shown that the interrogative intervals of the third, the fifth, and the octave, might be passed through on an immutable syllable. This was proved by the peculiar effect of the interrogative voice being distinctly cognizable on this sort of syllable: and I shall show, in the next section, that the smaller interval of the semitone, the peculiar expression of which may be recognized, whatever is the time of utterance, does likewise pass through the concrete, on the shortest syllables. Now we can scarcely refuse to the Tone, the attribution of that concrete movement on momentary syllables, which belongs to all the other intervals of the scale, when uttered with the same momentary impulse. This however, is certain:—there is one audible effect of the enunciation of immutable syllables clearly distinguishable from that of their utterance through the concrete space of the semitone, the third and other higher intervals. This may be a mere point of voice; but for the above reasons, I do believe it to be a rapid concrete passage through the second or tone.

Perhaps the reader may desire to know particularly, to what portions of discourse the Tone or second is applied, and with what continuity the diatonic melody, which consists in a play on this Tone, is used. In describing and illustrating this melody, I represented it as extended through successive sentences. The diatonic movement is however, rarely found of long continuation: the current of the Tone being intersected by the interposition of concretes with a different range of pitch. I have already said that the higher intervals of the scale are used for interrogative expression; that they are likewise applied to single words, as one of the modes of emphasis; and I shall show that other elements of pitch are occasionally introduced for this same purpose of emphatic expression. Now as these occasions for using the other intervals occur in most discourse, it will be found that the diatonic melody generally exists in detached portions; the continuity of the melody in the tone or second being broken by those other intervals: and this interruption will be more or less frequent, according to the prevalence of expression. A Gazette advertisement, a legal instrument, and the purely communicative style of plain narrative and of de-

scription may generally be read in the thorough diatonic melody. But there are few compositions which are addressed to taste, that have not their melody varied by the more or less frequent occurrence of the coloring of higher intervals than the second. According to the line I have endeavoured to draw between mere thoughts and what are called sentiments or feelings, and consistently with their appropriate intonation, it might be supposed that the demonstrations of Euclid should be read in one continuous stream of diatonic melody; but even these are perpetually varied by the higher intervals, introduced upon illative, absolute, and conditional phrases. The fragments of diatonic melody, occurring in prose declamation, in poetry, and in the drama, are generally small: and conversation, when not didactic, nor designedly solemn, nor unavoidably dull, almost banishes the melody of the tone, in the vivid coloring of its highly inflected intonation.

Since I have assigned restrictively, the interval of the second, in the form of the diatonic melody, to a certain character of discourse; and since it is desirable that this melody should be executed with the greatest propriety and elegance, it may not be amiss to point out the mode of managing the second, for the attainment of these qualities.

The diatonic melody being deprived of the resources of the higher intervals, and other modes of intonation, by which more sentimental discourse is expressively adorned, is limited to the means of excellence, arising out of the skilful ordering of time and stress. The different forms of stress which may be applied to a concrete rise of the second, will be described in a future section. The other principal means for adding dignity and grace to the delivery of a passage of this plain melody, and for producing a well measured rythmus, is by the adjusted variety of length, in the quantity of syllables. It is not, however, by the prolongation alone, that a clear and agreeable enunciation is effected, in a dignified form of diatonic speech. It is necessary that the length should be made with the equable movement which peculiarly constitutes this mode of intonation: and further, that the voice, in this equable rise of the tone, should have that full opening and subsequent gradual diminution, which suggested its subdivided distinction by terms, into radical and vanishing movement. He who has not cultivated

his voice in these particulars, will find it difficult to give the extreme protraction of an indefinite syllable, with its co-existent qualities of equability and vanish. He will, on trial, be very apt to carry out a long quantity, with the intonation of song. Being now acquainted with the three modes of the radical and vanishing movement, the light and guidance of a special purpose in study and practice, instead of the faltering blindness of imitation, may lead us to an unerring command over the equable concrete of speech.

The power of making long quantities on indefinite syllables, with the precision of boundary and the smoothness and nicety of vanish belonging to the best execution of this equable movement, is one of the most attractive and the rarest accomplishments of a speaker. The skilful performance of this concrete function, in the impressive fulness and dignity of the Orotund voice, gives the acknowledged satisfaction to a discerning ear, when an accomplished actor first breaks his silence in the dialogue; even though it is by a solitary syllable. With this temper of voice, his opening efforts cleave their way at once to approbation; and need no working on a dull material through the tedious whetting of a whole act, to bring it to an edge.



## SECTION XVIII.

### *Of the Interval of the Semitone; and of the Chromatic Melody founded thereon.*

THE smallest but not the least important division of the scale, through which the radical and vanishing movement may be heard, is the interval of the Semitone. In the second section of this essay, I described the means by which the reader can acquire a distinct perception of this concrete interval. It was



there said, that, if in ascending the scale, the effect of the transition from the seventh to the eighth place be compared with the syllabic utterance of a plaintive sentiment, their identity will be acknowledged. Now the interval from the seventh to the eighth, in the diatonic scale, is a semitone. This interval is used in speech for the expression of complaint, pity, grief, plaintive supplication, and other sentiments congenial with these.

If we ascend through the diatonic scale, by a repetition of the word 'fire,' subdivided into two syllables, so that 'fi' and 'yer' shall be alternately set on each point of the scale, it will be perceived that the transition from the seventh to the eighth place gives the same expression to the word 'fire,' as when it is uttered through the streets in the outcry of alarm.

The intonation by the concrete semitone, is universally, the symbol of nature for animal distress : and in the above mode of exemplification on the scale, its effect is very different from that of the concrete passage of the word through the space of a whole tone, between the first and second points of the scale. Among a multitude of voices, where the alarm is given by public cry, this utterance through the second is occasionally heard : and I am sure some of my readers may be able to call to mind the defect of its dissonant difference from the intonation of the great majority. I can not exemplify it by the pen : but when the uncommon impression of a particular cry is not produced by quality or shrillness, it generally arises from this misapplied form of pitch. The genera of mankind always show forth their characteristics ; and though there may sometimes be error in judging of the full aggregate of qualities thereby, there is often truth, and always caution, and economy of opinion in the use of the rule. Be this as it may, I never hear the cry of 'fire' made through the interval of a whole tone, without a persuasion of the general impotence or deformity of that voice or that ear, which can, in this particular, so far transgress the ordination of nature.

The semitone is employed for the expression of gentleness of feeling : and never for that of great energy, harshness or impetuosity of thought. It affects generally a slow time and long quantity in utterance. The interjective exclamations of pain, grief, love and compassion are prolongations of the tonic

elements on this interval. But it can be executed, and the effect of it is distinctly perceptible, as I hinted in the last section, on the short time of immutable syllables. For it will be found on experiment, that the word 'cup,' or any similar immutable, can be uttered in a plaintive or complaining tone, even in its shortest time. Since then this plaintiveness, when made with long quantities, on which the transition may be distinctly measured, is always produced by the concrete semitone, and not by a movement through any other known interval of the scale; it may be fairly concluded, when this plaintiveness is heard on an immutable syllable, that the semitone is rapidly performed, even though the gradual course of its time and motion is imperceptible.

In the next section, I intend to speak of the nature and uses and various intervals of the downward vanishing movement. But it is necessary to consider here transiently the downward vanish of the semitone; since its function is involved in the subject of the chromatic melody of speech which I am about to describe.

The downward radical and vanishing semitone may be exemplified, by beginning at the top of the scale, with the word 'fire,' divided as above into two syllables, with the addition of the subtonic 'y-e,' and descending by the alternate use of these syllables. The sound, in the concrete passage from the eighth degree to the seventh, will have a plaintive character, though somewhat different from that of its upward progress through the same interval. Whereas the concrete passage downward through a whole tone, between the second and first, will not produce that plaintive effect. From this account it may be understood, that if the voice should rise concretely through the semitone, and afterwards in continuation should descend through it, the effect as far as regards expression, would be an iteration of movement, and a prolonged influence of the plaintive character. Now as the sentiment which dictates the semitone usually affects a slow time and an extension of syllabic quantity, the expression of this interval is generally made by the continuity of its upward and downward concrete movement. This structure answers two important purposes. It creates a stronger impression of the sentiment: and by doubling the interval, it allows a prolongation of quan-

tity, without endangering the integrity of the equable concrete, by the liability of a long quantity, to pass into the protracted radical or vanish of song and recitative. The expressive character of this doubled semitone may be exemplified by making an immediate return in the downward direction, after having ascended to the top of the scale. For the highest interval of the scale being a semitone, if the concrete ascent be continued with an unbroken current, into a return upon that interval, as the commencement of the descending scale; and if we pause after this first downward step, we shall perceive an effect of intonation exactly resembling that which belongs to the plaintive utterance of a protracted syllable of speech.

The sentiments which are naturally expressed by the semitone are sometimes restricted to individual words; sometimes they extend over phrases and sentences, and even throughout entire sections of discourse. These last occasions requiring the semitone on every syllable, necessarily produce a melody consisting of a continued succession of that interval. In the sixth section the Diatonic melody was represented as formed by the progression of pitch through the interval of a whole tone. That which is here spoken of being through a semitone, may be called the Semitonic or Chromatic melody. Like the former it is subdivided into the current melody, and that of the cadence. The movement of its current resolves into seven sorts of phrases, similar to those in the diatonic progress. But as the change by radical pitch in the chromatic current, is through the interval of a tone, only when it descends, and not when it ascends, as will be shown presently, the use of the nomenclature must be pardoned, when I call the several semitonic phrases by the terms assigned to those of the diatonic melody.

The doctrine of key and of modulation is the same in the two melodies. A similar appropriation of phrases to the pauses of discourse, for continuing or suspending or closing the sense, is used in each; and the same rule for varying the phrases of the current melody, in the production of an agreeable effect, is applicable to both. But as the sentiments which dictate the use of the semitone and its melody are always more grave or depressed than those associated with the diatonic, the former more frequently affects the phrase of the monotone.

In speaking of the diatonic melody I divided its constructive parts into the concrete pitch and the radical pitch. The same distinctions may be made in the progression of the chromatic melody. Its concrete is always essentially formed upon the interval of a semitone. Its radical pitch, if I have not been deceived, is conducted in the following manner. When the current melody descends, the radical change is downward, over the space of a whole tone. But when it ascends, the radical change is upward over the space of a semitone. This change of a tone in descending will be perceived on executing the downward ditone of a chromatic melody, and comparing its effect with that of the two first constituents of the triad of the diatonic cadence : for it will be found that if the downward radical pitch of a chromatic melody be followed by another downward radical similar to the first ; or in other words, if we attempt to make a downward tritone in a plaintive intonation, the triad of the cadence will be thereby so nearly accomplished, that it will solicit for its consummation, only the faint downward vanish of that triad on its last constituent. Now the triad of the cadence, in its tripartite form, is constructed of the successive descent of whole tones.

The following considerations lead to the conclusion that the radical change in the upward direction, is in some cases made by the step of a semitone. By intoning the scale in the manner directed at the beginning of this section, it will be perceived that after rising through the first semitone, on 'fi,' the next syllable 'yer' begins at the top of that preceding concrete ; thus making the radical change of the ascent in this case, a semitone : and as every concrete of a chromatic melody is a semitone, it follows, by the rule of the scale, that each successive syllable of a chromatic progression, when the radical pitch rises, must be at the distance of a semitone above the preceding.

But it has been shown that the concrete pitch of this melody is, in slow utterance, generally continued into the returning downward vanish of the semitone. On this occasion the above reason for the semitonic radical change does not apply. Whether in this case of the returning downward concrete, the radical change upward is by the semitone or the tone, I am not prepared to decide, with that confidence which I have felt on



other points of observation recorded in this work. On the whole, however, there is not much change of radical pitch in this melody ; since the monotone is its prevalent phrase.

It was taught in a previous section, that in the diatonic melody special purposes of expression call occasionally for the introduction of the interval of the octave, the fifth and the third. It will be asked, perhaps, if these intervals are ever found in the course of a chromatic melody : and if so, how they are engrafted on it. They have a place in it, both for the purpose of interrogation and of emphasis ; and are applied in the following manner.

Since plaintiveness is the characteristic of this melody, if an interrogative word in the course of it, should require the rise of either the octave, fifth or third, it is clear that the expression both of the semitone, and of that higher interval, should if possible be conjoined. But by the use of the high interrogative interval the plaintive expression would be lost. These two apparently incompatible effects therefore can be conjoined on one syllable, for the purpose of chromatic interrogation or emphasis, only by carrying the voice through the upward and downward semitone on the appointed syllable ; and by leading it afterwards in continuation from the extremity of the downward vanish, through the upward concrete of the octave or the fifth or the third, as the intended expression of the interrogation or emphasis may require. If the peculiar keenness and force of expression which was ascribed to the octave is recollected, it must at once be supposed that it is rarely found among the signs of semitonic interrogation : the more abated power of the third or fifth being commonly used for this purpose. Perhaps the reader may not be dissatisfied if I here think it unnecessary to set forth this subject of the chromatic melody, by a scheme of notation. The precision I have endeavoured to give to the terms of the description, will I hope enable him to understand it without delineation ; or to mark the tablature for himself.

The cadence of a chromatic melody is made by a peculiar construction of the triad.

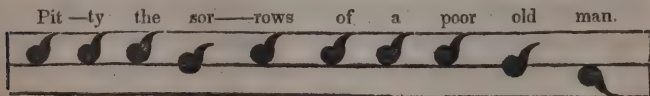
The reader will find on experiment, that there is no other mode of reaching the satisfactory pause of discourse, on three distinct syllables, than that which was described in the history

of the diatonic cadence ; and which consists in the radical descent of whole tones, as noted in the first and second sorts of cadence, in the sixth section.—Consequently the chromatic triad must be made by a similar radical descent, since a downward triad of three semitones, would make no more than a tone and a half. But the concrete pitch or vanish of these radicals, which thus descend by a tone, is made through the space of a semitone ; and the plaintive character of the melody is thus communicated to its close.

It deserves to be remarked here, that a passage which requires the intonation of the chromatic melody, may sometimes be terminated by the plain diatonic triad ; whether that close be made by its tripartite separation, or by conjoined constituents, as was illustrated in the history of that cadence. Indeed it may be further observed, that insignificant and slightly marked particles in a chromatic sentence, may bear a radical and vanishing whole tone, without deducting much from the expressive effect of the semitone when heard on all the important words and long quantities of the sentence. Of the forms of the diatonic cadence, which I have said may be occasionally applied to a chromatic melody, I have already spoken in the sixth section. I here take notice of those forms of the close which carry a plaintive expression.

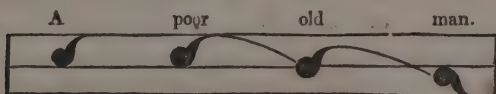
The chromatic cadence may be made on a single long syllable : or it may be allotted to two syllables : or the space of its descent may be divided between three.

If the three constituents are joined severally to three syllables, the close is made by taking the radicals at the interval of a whole tone in descent from each other ; and by giving to each of the constituents, except the last, the rising vanish of a semitone ; the last having the feeble downward vanish, such as belongs to the diatonic cadences. This is exemplified in the following notation : in which the lines and spaces still designate the difference of a whole tone, except in the measuring of the concrete issue of the points, and of the *upward* change of radical pitch ; both of which must be taken as indicative of the space of a semitone.

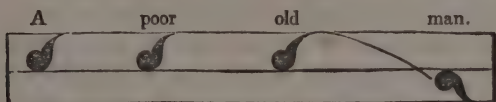


It is true that the concrete semitonic rise, in continuation with a subsequent fall below the radical, may be given to the last constituent, and that a plaintive expression may thereby be communicated to it: but in this case the perception of the close will not be so complete as when made in the manner of the above notation.

The tripartite chromatic cadence may also be made by assuming the above construction, and by joining the constituents through a downward vanish: the plaintive character still flowing from the semitonic rise of its two first constituents, thus:



When the plaintive close is spread over two syllables, the first constituent rises through a concrete semitone, and the voice is continued from this vanish, into the last syllable, which ends in a feeble movement, in this manner:



The chromatic close may be made on a single long syllable: but its effect is bad, and it is perhaps never used in correct speech, except for some special design of expression, which has no necessary connexion with the mere cadence. The inadmissible nature of this cadence arises from the use of the upward semitone, which must be heard on the first part of that syllable, for the purpose of giving a plaintive construction to the close. Now the continuation of this rising semitone into the downward third produces an element of expression, if I may so call the combination, which may indeed carry the power of a close: but it does at the same time, join with it an

intonation of affected mockery, altogether foreign to the desirable and appropriate character of the simple cadence.

There is still another form of the Chromatic close, resembling the skipping cadence of the diatonic melody. It consists of a concrete semitone on the antepenult syllable, and an immediate discrete descent by radical pitch to the final constituent of the triad ; omitting the second altogether. It is unnecessary to give a diagram of this form, since it is shown by the last example of notation, when deprived of the concrete junction of the two constituents. It is rarely used as a close ; and only when some peculiar emphasis, as, of surprise, may happen to lie on the last word of the sentence.

As in the diatonic cadence, so in the chromatic, there are different degrees of repose : and these depend on the construction. That entire consummation which is demanded at the period of discourse, is effected by the tripartite form of the first of the above notations. The second which is still tripartite, but which has its constituents conjoined by the downward vanish, has perhaps a character of somewhat less repose than the first : since the radicals in this case, are less distinctly marked by the explosive fulness which belongs to them when they are not conjoined ; and it is this conspicuous display of the descent of the radical pitch which gives the marked effect of conclusion. The third construction represented above, is the most feeble form of the chromatic cadence ; for being made upon two syllables, it has less of the character which is derived from the change of downward radical pitch. This mode of cadence then falls short of the expression required for a satisfactory close.

In concluding this history of the five enumerated intervals of pitch, and of their uses in elocution, I have only to add, that, as far as my observation goes, I believe the intervals of the Fourth, Sixth, and Seventh are used in speech for peculiarities of expression similar to those of the intervals which adjoin them, and which have been described above. The third, fifth and octave which are adjacent to those omitted intervals, are more easily recognized by the ear, not only upon the discrete steps of an instrumental scale, but also through the continuous slide, in the human voice. It is on this account I have limited the enumeration in the preceding sections, to certain five inter-



vals of the natural scale. I have not satisfactorily ascertained the properties of the remaining three, if indeed they possess any that are peculiar : and I have not thought the investigation worth further trouble.



## SECTION XIX.

### *Of the Downward Radical and Vanishing Movement.*

THE functions of pitch hitherto described are performed principally by a rising progress of the concrete, and of the radical change.

In an early page of this essay it was shown that the voice may take a reverse direction ; that the radical movement, opening with fulness on a given place in the scale, descends through its destined interval, with that equable concrete structure and diminishing force which characterizes the upward vanish. We must now consider the varieties of form in the downward concrete, the occasions of its use, and the nature of its expression.

The downward progress of the voice is made through all the intervals named in speaking of its rise : and in like manner with the rise, the descending transition is both by a concrete movement, and by a discrete change or leap of the radical pitch. The effect of the descent, whether done concretely or by discrete skip, may be manifested, and the characteristic expressions of the several intervals rendered precisely cognizable, by means of the following experiments.

Let the reader express himself familiarly on the exclamatory phrase, ‘ well done,’ in the way of high astonishment : taking care that the first word is assumed at a high pitch ; that the last has an unusual prolongation of quantity ; and that the words

are uttered as if they formed the close of a sentence. If the intonation of the word 'done' be according to the manner here proposed, it will exemplify the Downward concrete of the Octave. Again—let him give the interjection, 'heigh ho,' with that degree of emphasis which may throw these two words on the extremes of the compass of the natural voice. He will thereupon find that the transition from the elevated pitch on 'heigh' to the inferior place of 'ho,' will be by a discrete or skipping descent. Now this transition, when the intonation is pointedly marked as above directed, is made by the downward Radical pitch of the octave.

The Downward Fifth, both in its concrete pitch and in its discrete radical change, may be made audible by employing a somewhat less vivid coloring of intonation than the last, on these same words.

The concrete Descent of the Third may be heard by pronouncing the word 'No,' as if it were the last word of a sentence; observing to give it some length, and to exclude from the utterance every expression except the simple indication of the cadence. The downward Radical pitch or skip of the third, may be exemplified by pronouncing the phrase 'made an attack,' as if it were a full close, giving the syllables 'made an at,' in the monotone, and making the satisfactory close on 'tack.' For, in this case the syllable 'at' is the first constituent of the triad: and being by its short quantity incapable of a concrete descent to fill up the close, the voice of necessity leaps over the place of the second constituent and terminates the cadence on 'tack' in the proper point of the third.

The effect of the Downward concrete Second or tone may be made familiar, by attending to the last constituent of a diatonic cadence, in its tripartite form. The radical change of the second may be heard in the descent of the constituents of the same cadence; since its radicals succeed each other by the difference of a tone.

The Downward concrete of the Semitone was described in the last section, as being plaintively obvious in the vocal transition from the eighth to the seventh place of the scale. If it is true, as I have ventured to assert of the chromatic current melody, that its change of Radical pitch in a downward course

is like that of its cadence, a whole tone, it follows that we have no instances in speech, of the discrete downward pitch of the semitone. But I leave this for future observers.

If the reader is by this time expert in ascending both concretely and discretely, through each of the intervals of the scale, he may after rising, immediately return through the same interval, whilst the impressions of its extremes are fresh on his ear; and thus in another manner become familiar with the different extent of the downward movement, both in its concrete and discrete progress.

I have been speaking of the downward movement when made on long quantities: but like the rising progress, it may be shown on immutable syllables: the transit through the given interval being rapidly performed. Yet it must be remarked that when the characteristic expression of an interval is required on immutable syllables, the transition is generally made by the change of radical pitch.

The expressive powers of the downward radical and vanish, will be assigned in a subsequent consideration of the particular intervals of the scale. As a general remark on its character, it may be said in contradistinction to the effect of the Third, Fifth, and Octave, which have an interrogative meaning,—that the downward progress through these divisions of the scale expresses a positiveness of affirmation which is directly the reverse of the doubt contained in a question. Some other inquirer may hereafter refer this expression of the downward concrete, to a more general class of phenomena in vocal science; and thus satisfy our present ignorance of its cause. I can not however avoid offering here the suggestion, for I wish to be cautious in touching analogical argument, that the positiveness of character which belongs to it may arise from its conjoining with its emphatic import a certain degree of the final impression of the cadence: for this seems to preclude the expectation of further doubt or reply, by the satisfactory repose of the ultimate intonation on a finished sense. In corroboration of this suggestion let us bring to mind that the replications of doubtful argument in dialogue, from the yielding of mutual civility between the speakers, are not marked so freely with complete cadences, as the termination of the sense in many of the phrases would otherwise bear. But we know that

when the assertions become authoritative from truth, or dogmatic from opinion, the closing intonation of the cadence is employed as the definite seal of self-confident affirmation.

After all, however, the strict duty of philosophy reproves us for our conjectures, and allows us here only to set forth this new instance of the consistent ordinations of nature : for as the sentiment of inquiry is the direct contrary in the human mind, to that of assured declaration, so in the instinct of the voice, the very opposite movements of rise and fall, are employed for their respective modes of intonation.

The downward vanish is used for the purpose of emphasis, as will be particularly marked in a future section. It has nearly an equal power of attraction over the ear, with the upward vanish. The expressions of wonder, admiration, surprise and exclamation, when not conjoined with an interrogative meaning, are generally made by a form of this element ; the extent of the interval being proportional to the degree of energy in the sentiment. As the downward concrete is formed in the same manner with the rising, having, metaphorically speaking, but a different direction, we may ascribe the same qualities of construction to both. The same explosive fulness should mark the radical ; there should be the same equable movement in its descent ; the same delicate and smooth diminution and final vanish into silence.

After these general remarks on the subject, we proceed to the history of the particular intervals of the downward movement.



## SECTION XX.

*Of the Interval of the Downward Octave.*

THIS interval, in addition to the expression, ascribed generally to the downward movement, conveys in the colloquial uses of the voice, the vivacity of facetious surprise, as in the instance of the phrase 'well done,' given above. It is in this case the very picture of amazement, and if I may so speak, raises the brow and opens the eye of the voice. In its more dignified uses, there is the highest degree of admiration or astonishment, either alone, or united with other sentiments. Thus the astonishment and positiveness marked by this interval, may be coexistent with the complacent feeling of mirth and sociability, or with the repugnant sentiment of fear or contempt or hatred, or in short, with almost any state of mind which is not contradictory to that astonishment and positiveness. For though these superadded sentiments have other symbols in expression, yet when they go with this high degree of astonishment, the downward octave is the true and only sign of the combination.

But as the same interval can thus represent different sentiments, it may be inquired,—whether some modification of its structure may not be necessary; and if so, how it is modified. It is modified in this manner. I shall particularly show in a future section, that the concrete movement, whether its direction is upward or downward, may bear with distinguishable audibility, additional force on the beginning or on the middle or on the end of its progress through a prolonged quantity. The names and further uses of these three kinds of stress will be given hereafter. Now in the appropriation of these forms of the downward octave to the different sentiments which were said to be within its expression, I assign the simple or natural form of the radical and vanish to the feeling of a high degree of mirthful wonder. When the force is laid on the middle of its

course, by a swell at that place, the expression becomes more repulsive with its wonder. And when force is applied to the lower extremity, reversing thus the natural structure of the radical and vanish, it increases the degree of the repulsion, and mingles with it some slight affection of anger and of scorn. The characteristic thus assigned to the octave, might at once assure us that it is of rare occurrence. It may be found occasionally in the intensity of colloquial excitement, and in the fervor of the drama : but never perhaps in the course of narrative or description, since the strained energy of its expression must be the real or the personated pouring out of the heart.



## SECTION XXI.

### *Of the Interval of the downward Fifth.*

THE expression of the last described interval is marked by a quaint sentiment of familiarity, or by an excessive degree of violence. The Fifth has in many respects a similar meaning; but it clothes its sentiments of smiling surprise, and of admiration whether it is passive or repelling, with greater dignity than the octave. This interval is often used on imperative phrases. Its concrete, like that of the octave, may be modified in meaning by the different applications of stress.

The following derisive exclamation of Gabriel to Satan, in the fourth book of *Paradise Lost*, is properly made by the natural form of the fifth; that is, by stress on the radical or opening portion of the interval, whilst the vanish dwindles away in its descent.

Courageous chief!

The first in flight from pain!

The syllable ‘*ra*,’ here signalized by italics, is made by the natural or unaltered radical and vanish of the falling fifth.

## When the Queen says to Hamlet—

If it be, [that is, if death be the common lot]  
Why seems it so particular with thee?

## Hamlet returns—

Seems, Madam, nay it *is*! I know not seems.

Now '*is*,' here marked in italics, when uttered with the downward concrete of the fifth, represents most perfectly the positive affirmation and surprise of the speaker, at the misconception of his real state. But the solemn feeling of the prince, which rejects, with some little indignation, the profanity of the supposition, that there is any formal show in the deep reality of his grief, can not be expressed by the natural form of the radical and vanish. There is a light and pleasant surprise in this mode of the concrete which would misrepresent the sentiment. But if the voice is swelled to a greater stress as it descends, the grave severity and dignified conviction of the speaker become at once conspicuous. The intonation of this line may be thus delineated :

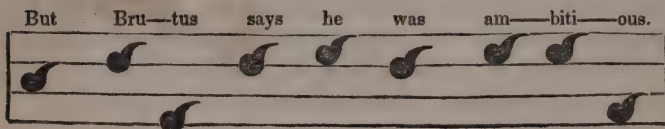
Seems, Ma—dam, nay it *is*! I know not seems.



I have in this reading set a rising third, or the most moderate form of interrogative expression, to the first word ; for there is in it a slight sentiment of inquiry. The succeeding clause, which contains a most positive affirmation, has the downward fifth ; and the whole scheme is calculated to show the opposite powers of expression in the rising and falling intervals.

This is not the place to represent the notation of stress : therefore I have drawn the natural radical and vanish of the fifth. In a future section I shall show the reason, why the radical of the downward movement is here set so far above the line of the current melody.

The discrete transition of the falling fifth, or the change of radical pitch through that interval, has somewhat of the expression of its concrete form. It is applied on those syllables which will not bear a prolongation, necessary for the concrete; and on the occasions of its employment, the two extremes of the interval are made on two different syllables. The following notation will exemplify the radical change or skip of the falling fifth:



If I have a right conception of the manner of exhibiting the sentiment of this line, I would say, it requires the intonation of grave surprise rather than that of contemptuous contradiction, with which it is sometimes read. The craft of Antony's oration turns upon the excitation of odium against the conspirators, by the favorable and moving representation of Cæsar's virtues, more than by the coloring of the crime of his assassins. And though in the well known burden of the speech, they are reported as honorable men, certainly not with the least good will in the title, still, the vocal curl of sneer, which we sometimes hear on this phrase, is inappropriate and affected. At least this may be said of it, as it occurs in more than the first half of the speech: and when at least the speaker is encouraged to bolder sentiments and declarations, they are those of quick and keen revenge; which wastes no time in the winding circumflex of contemptuous intonation. But whatever may be said of other parts of the speech, I must claim for the line above noted, the mode of intonation which expresses the surprise of the speaker, that any one could so violently reverse the fair conclusions from motives and actions: leaving to the audience to infer, from this surprise, that some other than ordinary or honest reasons must have influenced Brutus to make the ascription of ambition to Cæsar. If the notation of the passage be made in the common diatonic melody, with the difference of a tone only in the changes of its radical pitch, it will



become a mere report of a saying of Brutus; without the least show of the sentiment I have ascribed to it, and endeavoured to justify.

## SECTION XXII.

### *Of the Interval of the Downward Third.*

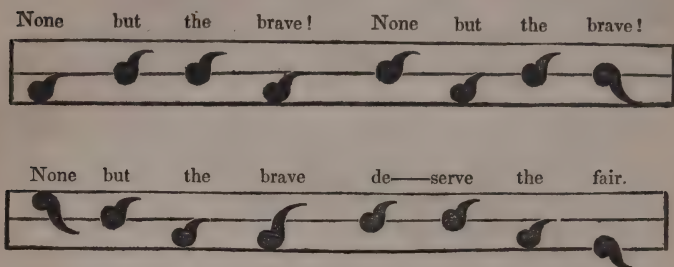
IN general description, this interval may be said to carry the moderated expression of the fifth.

The dignity of vocal character, like that of personal gesture, consists not only in the abatement of force, and in the slowness of time, but in a limitation within the widest range of movement: And as there is more composure and solemnity in that form of interrogation which is made by the rise of the third; so the expression of surprise and admiration which belongs to the downward intervals, is in its most subdued and dignified degree, when heard on the falling third.

One of the remarkable functions of the concrete descent of the third, is that which is performed on a syllable of long quantity, when found at the end of a sentence, or of a clause of discourse which contains a complete sense, but which may not be marked by the grammatical notation of a period. This use of the third was noticed and illustrated in the sixth section, and there described as constituting the feeble cadence. Its character has this double bearing: it seems to indicate that the sense may be taken as terminated at its place; and yet it does not altogether destroy the expectation of a further continuation. No one on hearing this cadence, would suppose the discourse to be finished.

As the rising third is sometimes used for emphasis alone, in-

pendently of its interrogative import ; so the falling third may be employed, as the means of emphatic distinction, merely for the purpose of varying the effect of intonation. This may be illustrated by the following notation :

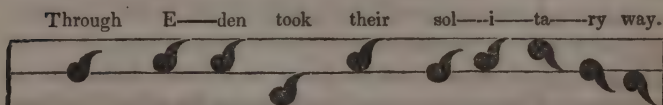


There is certainly no inquiry conveyed by these words : yet I have set the rising interval of the third on one of the emphatic syllables. But there is a feeling of admiration in the case which may be expressed by the upward third, as was said in speaking of that interval. And it will be shown hereafter that all emphatic words, whatever other sentiments they may happen to comprehend, do carry with them something of the admirable. On this ground then all the emphatic repetitions of the word *brave* might receive the same interval. I have varied the intonation by setting the plain rising tone to the first *brave*, the downward third to the second, and the rising third to the last : and this appropriation together with the falling third on the word *none*, does satisfy my ear by its agreeable effect. Speakers who are not aware of the efficacy of intonation, or who can not skilfully command it, endeavour to attain a desirable variety in this case, by the transfer of emphasis. They apply it in the repetition, successively to *none* and *but* and *brave*. If I here properly understand the poet, and have any discrimination of the uses of the voice, I must say that this mode of emphasis should not be employed, even though there might be no other means for variety. The contradistinction made by the stress on the several words implies a different meaning in each case. But reiteration is the rhetorical sign of fulness of feeling, or of its rising energy ; and never of a change of sense. The attempt therefore to vary the meaning of this phrase, which

must be identical under any change of emphasis, offends against both dignity and truth, and betrays a limited power over all the means of vocal variety. The full command of quantity, and of the numerous elements of expression, renders it easy to relieve the ear from monotony on this passage, without changing or distorting the sense of the author : which, if the composition was a prompting of poetry, and not a mere trick of emphasis, must have been intended to be identical in all the repetitions.

In the above notation, I have shown nothing of the uses to be made of time and force : though both are available in this case, and give additional means for variety.

The downward radical pitch of the third which consists of a skip of three degrees, is employed for the purpose of emphasis : particularly where this is necessary on immutable syllables. But there is a special use of this element, for effecting a full consummation of the close of melody, which must not be overlooked. In speaking of the cadence I remarked that its different species denote various degrees of repose : the tripartite form, in which each of the radicals with its downward vanish, is heard distinctly in successive descent, being the most marked indication of the period. It is possible, however, to increase the characteristic of this form by additional means. A gradual descent of the current melody as it approaches the cadence, is sometimes employed with that intent ; and properly. But another more elegant and impressive mode is to apply the downward radical change of the third, on some syllable preceding the close, as in the following notation.



If this line be read with the diatonic radical succession throughout, the cadence, by its tripartite form will indeed mark a completion of the sense ; but the application of a downward radical change of the third on *took*, gives that warning of the period, or that note of preparation, which produces the utterly reposing termination which must be felt by the speaker

and is required by the audience, on this last line of *Paradise Lost*.

Other cadences denote, in various degrees, the conclusion of a particular sense. This, Prepared cadence, if I may so call it, implies that the subject itself, of a paragraph, a chapter, or a volume, is finished.

Let us here take a view of the various kinds of cadence.

In the sixth section, five modes of the diatonic cadence were enumerated. Now the Prepared form just described may be united with each of these, thus constituting ten distinct species: to say nothing of the chromatic. These should be severally employed by speakers, not only to give just expression to the close; but likewise for the purpose of variety. If it would add precision to this subject, some of the forms of the cadence might be specifically named.

The first form described in the sixth section may be called the rising triad, or tripartite form: because it consists of three constituents; and two of them have the upward vanish.

The second form may be called the falling triad.

The third may be called the first Duad: because it has but two constituents; the first embracing the space of two tones.

The fourth may be called the second Duad: because with only two constituents, the last occupies the place of two tones.

The fifth may be called the Monad form of the cadence, from the space of the three constituents being executed on one syllable.

I do not expect the reader to be able at once to distinguish all these modes of the cadence: nor indeed is it necessary. Some of them, however, can not be mistaken. The prepared form when set before the falling triad, is the most complete close; and this is clearly separable from the monad, or what I call the feeble cadence, which gives the faintest indication of the period. I believe no ear will confound the effect of either of the triads, the monad and the prepared cadence.

I have little to say of the downward minor third; its expression, like that of its upward concrete movement, is plaintive; but as well as my ear informs me, it is not used for those purposes ascribed to the major third.



## SECTION XXIII.

*Of the Downward Second and Semitone.*

I HAVE clased these intervals under the same head, on account of the limited extent of the remarks here made upon them. They have a high importance in speech, but it is principally as appendages to the rising movement of the same intervals, in that form of intonation which has been called the circumflex, but which, in the next section will be named the Wave.

The most remarkable use of the downward second or tone, is as the last constituent of the cadence, either in the diatonic or chromatic form. It may be applied also to the two other constituents: and is used occasionally in plain melody, for the purpose of varying the impression of the rising second, which, in the history of that melody, was given as its characteristic.

The downward semitone is sometimes employed for the purpose of variety, in the current of a chromatic melody. It may also be applied to the first and second constituents of a chromatic cadence; the radical descent of this cadence being by the skip of a whole tone; and the downward vanish on the last or closing concrete, being through the space of that same second or tone.

In terminating the history of the downward intervals, I can not avoid pausing a moment in admiration at the simple and well adjusted means which nature has appointed for the multiplied combinations and apparent complexity of vocal expression. Nor can I look on these available means without taking in the prospect of that art which, in no distant day, must grow out of the development of the true elements of elocution. I have not extended the analysis, nor made applications of the principles founded thereon, to the entire detail of the subject; being contented to encourage others towards a work of greater range and precision by setting before them what is here accomplished

in a case of supposed impossibility. For I am persuaded there will be some future and beautiful finishing of that system for the ordering of speech, which I plainly see is here but just begun. He who chooses to follow the path thus opened, may fortunately find himself among the first comers to an ungathered field : a field which has been unvisited and unclaimed only because it was believed by the indolent, to be barren or inaccessible ; or because the eye of irresolute inquiry has been turned from the leading star of observation, by the vain attractions of theory, and the delusive authority of names. For what does the term, genius for discovery mean, besides—the art of forgetting ourselves and others, and looking exclusively and perseveringly at our work? Too many, alas! imagine they are doing all these things, when they are only thinking of notoriety, and hunting after the favorable opinion of mankind.



## SECTION XXIV.

### *Of the Wave of the Voice.*

By the Wave of the voice, I mean the junction of the upward and downward movement in continuous utterance. This function was known to the Greeks : and is noticed by modern writers, particularly by Mr. Steele and Mr. Walker, under the term, Circumflex accent.

As the wave is composed of the two opposite courses of pitch, each of which has its different intervals, and as the direction of the outset of the voice and the number of its flexures may vary, the reader must expect to find in the history of this symbol, numerous and somewhat complicated subdivisions.

The Wave is a very frequent element in expression, and performs high offices in speech. It therefore becomes him who would not be a pretender in elocution, and who is willing to turn from the falterings of spontaneous effort in art, to the fulness, the purpose, and the precision of scientific order and rule—it becomes him not to overlook the investigation of the wave.

In order to represent this matter clearly, let the several upward and downward movements, which by their continuity make the wave, be called the Constituents. It is plain then that the constituents may be, octaves or fifths or thirds or seconds or semitones.

Further, as the upward and downward concrete may be of various dimensions, it follows that the wave may be constituted of an upward and downward movement of the same interval; or these constituents may differ from each other in extent. Thus the wave may consist of a rising and a falling third conjoined, or of a rising second continued into a falling third. These varied modes of construction give occasion for a distinction of the wave into Equal and Unequal.

It will be found on experiment, that the wave with its first constituent ascending, and its second descending, has a different character of expression from one, which by first descending, has a reverse course of its constituents. Of the variations thus produced, let the former case be called the Direct wave, and the latter the Inverted.

I have thus represented the wave as consisting of two constituents only; but it may have three or even more; for the direct may have a subsequent rising interval, and the inverted, a subsequent falling one. If there are but two constituents it may be called the Single, and if three, the Double wave. When there are more than three, as may happen in some cases to be pointed out presently, it may be called the Continued wave.

By reflection on these distinctions, we may discover their reciprocal relations. Thus the equal and the unequal wave may each be direct and inverted—single and double. The double-unequal may have its three constituents dissimilar, or two of them—the first and second, or second and third, or first and

third may be alike. The direct and inverted, may each be equal or unequal—single or double. And the single and double may each be equal or unequal,—direct or inverted.

But perhaps these relationships will be better understood from the tabular view in the next page.



### Classification of the Wave.

Equal,	Having constituents of equal intervals.				As constituents throughout.
	Single,	Having two constituents.	Direct,	First interval rising Octave, Fifth, Third, Second, Semitone,	
			Inverted,	First interval falling. Octave, Fifth, Third, Second, Semitone,	
	Double,	Having three constituents.	Direct,	First interval rising. Octave, Fifth, Third, Second, Semitone,	
Inverted,			First interval falling. Octave, Fifth, Third, Second, Semitone,		
Unequal,	Having constituents of unequal intervals.				As first constituent.
	Single,	Having two constituents.	Direct,	First interval rising. Octave, Fifth, Third, Second, Semitone,	
			Inverted,	First interval falling. Octave, Fifth, Third, Second, Semitone,	
	Double,	Having three constituents.	Direct,	First interval rising. Octave, Fifth, Third, Second, Semitone,	
Inverted,			First interval falling. Octave, Fifth, Third, Second, Semitone,		

In the preceding table, I have marked only the first constituent of the unequal wave. I therefore subjoin a tabular scheme of the second and third constituents of this wave, in its single and its double forms. I beg the reader to take this delineation as the history of what is performed by the voice, in the multiplicity of its combinations; not as the record of a point of any practical utility.

In thus penetrating the recesses of nature, I must be allowed to describe her most minute phenomena, however presently useless it may be. I do assert then, that nearly all of the conditions here noticed, may be made designedly by a skilful use of intonation; and they are perpetually made in daily discourse, by the instinctive efforts of speech. But the expression of the unequal wave, as far as I can perceive, is limited to a few sentiments: most of the varieties here given, being only permutations of constituents, answering the same purpose. Whether these symbols, which are not specially significant with us, have ever among nations been made the signs of ideas or feelings, is yet to be told. We have heard, but the account is altogether vague, that the Chinese vary the meaning of the same elemental or syllabic sound, eight or ten times, by the changes of intonation. Do they draw upon any of the forms of the following table of the unequal wave?

		The first constituent being	The second constituent being either a	The third constituent being either a
Unequal Wave.	Single.	Direct or Inverted,	An octave,	Semitone second third or fifth.
		Direct or Inverted,	A Fifth,	Semitone second third or octave.
		Direct or Inverted,	A Third,	Semitone second fifth or octave.
		Direct or Inverted,	A Second.	Semitone third fifth or octave.
		Direct or Inverted,	A Semitone.	Second third fifth or octave.
	Double.	Direct or Inverted,	An Octave.	Semitone Second Third Fifth or Octave. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 3d or 5th.
		Direct or Inverted,	A Fifth.	Semitone second third fifth or octave. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 3d or 8th. Sem. 2d 3d 5th or 8th.
		Direct or Inverted,	A Third.	Semitone Second Third Fifth or Octave. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th.
		Direct or Inverted,	A Second.	Semitone Second Third Fifth or Octave. Sem. 2d 3d 5th or 8th. Sem. 3d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th.
		Direct or Inverted,	A Semitone.	Semitone Second Third Fifth or Octave. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th. Sem. 2d 3d 5th or 8th.

From a comprehensive view of this table it will be manifest to the reader, that there are several different modes in which these functions may be arranged. Any of the distinctions given above might be taken as the generic heads of the wave ; and the others might be included as species. Thus we might take the five intervals for the heads of as many sections. Then under each, for instance the octave, we might consider,—first, the equal form of this interval, and its combination with other intervals into the unequal form ; secondly its direct and inverted, and thirdly its single and double forms. Or we might take the distinction into single and double for the two generic heads, and under each of these, enumerate the species, as being equal or unequal, direct or inverted : and so of any other assumed order of these distinctions.

I shall, according to the arrangement in the table, divide the phenomena of the wave into two great classes, the Equal and the Unequal ; and subdividing each of these by the five intervals of the scale, I shall under the heads of these intervals, consider the direct and the inverted, the single and the double forms of this element.

The pains which have been taken to define the technical terms of this essay, and the many illustrations which have been given, must have rendered the nomenclature and picture of the scale quite familiar to those who really desire to learn. The description may therefore be so easily understood, that it is unnecessary to give a notation of the wave. The reader may mark it for himself, and apply it to those syllables that convey the sentiments which will be hereafter assigned to its different forms. I shall give some examples of its use in a future section on emphasis.



## SECTION XXV.

*Of the Equal Wave of the Octave.*

By the designating term of this section is meant the continuous movement of the voice, in the succession of its upward and downward direction, through the interval here named. It may be either single, consisting of two constituents; or double, consisting of three: though this double form is scarcely used. It may also be differently constructed, by the first constituent ascending, and the second descending, which was called the direct wave; and by the reverse order of movement, which was called the inverted wave.

In order to understand the nature of the expression of the wave, let us recollect that this element is compounded of a rising and a falling interval, the respective expressions of which have already been described. Now it will be found that the wave generally partakes of the powers of its constituents; and further, that by its continuous flexure it enables the voice to carry on a long quantity without the risk of falling into the intonation of song.

It is proper to state in this place that the wave in all its forms, is modified by the application of force upon different parts of its course. I shall particularly speak hereafter of the variation of the power of the concrete by stress. I only remark at present, that it may be applied at the beginning or the end of the line of the wave, or at the place of junction of its constituents; and that the addition of force to its termination gives to the several species of the equal wave, a coloring of temper and of scorn, which they do not possess in the natural or dwindling form of the concrete.

The equal wave of the octave in its single form is not used, as far as I know, except for common colloquial mockery. In its double form it has the same expression, under a more continued quantity. If any distinction may be made between its

direct and inverted forms, the latter from its ending in an upward concrete carries the power of interrogation: whilst the former, from its downward final movement, has the positiveness which was ascribed to the falling intervals when uncompound-ed. If the direct and inverted wave of the octave be double, the rule on this point will be reversed; for the direct will then end with the rising movement.

On the whole, this element, in all its ways, belongs more to the mere history of speech than to its elegancies; and may rather, in point of use and expression, be classed among vulgar mouthings.



## SECTION XXVI.

### *Of the Equal Wave of the Fifth.*

I HAVE said enough of the nature of the wave and of intervals, to make it unnecessary to define this element. Its nomenclature alone is sufficiently descriptive of its structure. Nor need I say particularly of this nor indeed of the succeeding sectional heads of the wave, in what manner their single and double, their direct and inverted forms are made.

The equal wave of the fifth in each of its modes is used as one of the means of emphatic distinction; and has therein an expression varying with its form. The equal single direct wave of the fifth consists of an ascending and descending concrete, which have in their separated state, respectively, the sentiment of interrogation and surprise. But the conjunction of the opposite movements of those concretes, takes from the ascending interval, its indication of a question, and leaves the impressiveness of surprise or admiration on the syllable to which it is applied. But there is another effect produced besides this

annulling of interrogation. We have already learned that there is some difference between the expression of the rising and the falling concrete. The former is more cheerful and animated in its cast, the latter more deliberate and grave. Now if the discourse in which an impressive intonation of the fifth is to be used, is of a dignified character, that impressive intonation is given to the emphatic syllable by a continuation of the upward into the downward flow of this interval, in the form of its direct wave. But further, this wave is used instead of the separate rise or fall of its interval, for the purpose of giving more quantity to the syllable which bears it. I alluded to the emphasis of the simple fifth, in the fourteenth section, without a special reference to time: but if the sentiment of the phrase is such as to require an unusually long quantity, this wave or continuous downward turn of the fifth, takes the place of that simple ascending interval, which, in unskilful intonation, might be liable to pass into song.

The inverted wave of the fifth has the expression of surprised interrogation, arising out of the termination of its last constituent in the upward vanish of an interrogative interval.

There is not much difference between the expression of the single and the double wave of the fifth, except in the change of structure produced by the addition of a third constituent. The double-direct here assumes an interrogative expression, from the vanishing rise of its last constituent; and the double-inverted has the meaning of surprise from its downward termination. Perhaps there is a little scorn conveyed by the double forms of the equal wave of the fifth. This is certainly the case when the last constituent receives greater stress than the others. On the whole, however, this double form is not very frequently used as a symbol of expression.

## SECTION XXVII.

*Of the Equal Wave of the Third.*

THIS wave, as regards its degree of expression, bears such a relation to that of the last section, as the simple rise of the third bears to the simple rise of the fifth.

In all its forms, whether single or double, direct or inverted, the expression resembles respectively the different species of the equal wave of the fifth. The third, however, has in its several forms, a moderated degree of the characteristic expression of the similar forms of the fifth. From its reduced degree, it is of more frequent occurrence as the means of emphasis in unimpassioned utterance, than the fifth or the octave, which belong especially to the spirit of colloquial dialogue, and to the forceful emphasis of the drama. It also serves, like the other intervals of the wave, to spread out the quantity of syllables in deliberate and dignified discourse.

The equal wave of the minor third, by the duplication of the single interval enhances its plaintive expression. It may be occasionally used as a mode of emphasis in the chromatic melody, but its more common employment is for enforcing the effect of crying. The expression of the inverted wave of this interval, does not much differ from that of its direct form.



## SECTION XXVIII.

*Of the Equal Wave of the Second.*

WE come now to consider the most frequent and one of the most important forms of the wave.

In speaking of the expressive power of melody in the tenth section, it was said that the predominance of the phrase of the monotone was instrumental in the expression of dignity and solemnity : and the first few lines of the second book of Milton, were noted, in illustration of this principle. I must now add that a long quantity, on the accented and emphatic syllables, is an essential condition in the accomplishment of that dignity of expression. But it is necessary, for the full perfection of this character, that a certain mode of intonation should be set upon these long quantities ; and the requisite mode is that of the Equal wave of the second, either in its single or double, its direct or inverted form.

The diatonic melody was described as if the vanish of every syllable is upward, whatever the character of the plain discourse may be. It has since been shown that the downward vanish of a second is occasionally introduced with a view to vary the current. The difficulty of making a perspicuous arrangement in a subject altogether new, and of giving a full description of parts, which are elementary and closely related, but which must be successively explained, has obliged me to proceed in that way of gradual and partial development, of frequent reconsideration, and of addition, which distinguishes the descriptive method of this essay. Consistently with this chosen order, I have now to add that the rising movement of the voice whatever be the interval, (except the semitone,) has more gayety of expression than the downward progress. Hence discourse of an easy and sprightly character, of quick time, and of short quantity, is generally carried on with the rising vanish of the employed interval ; as may be seen in foregoing representations of the diatonic melody. But if the discourse should

be of a grave cast, and necessarily call for long quantities, as indeed happens in some of the examples which we have noted merely with the rise, then the wave of the second is to be used. For the subsequent descent of the interval, forming thus the direct wave, takes off the light and familiar expression which belongs to the simple rise of the second : whilst the length of the quantity being consumed by the line of contrary flexures, the voice is still kept within the rule of the equable intonation of speech.

What is here said of the use of the direct wave of the second, in adding dignity and solemnity to a diatonic melody, is also true of the inverted wave. For if the reader be able to make the rise and continued fall through a tone, or reversely the fall and the rise, on any chosen literal element or word, he will observe a difference in the effect. But each case will be equally destitute of that striking intonation, which belongs to the wider intervals, whether upward or downward, and which would be incompatible with the avowed character of the diatonic progress ; except for the occasional purpose of emphasis. But these two contrary forms of the wave of the second, without adding any high coloring to the melody, serve to give variety to the intonation of solemn discourse.

I am not aware that the double form of the equal wave of the second has any peculiar expression or power beyond that of its single form, except in extending the quantity of syllables. Indeed, the unusual protraction of quantity in the diatonic melody, instinctively produces the double form of the wave ; since the voice may take this serpentine line, through the second, without producing any unpleasant snarl, similar to the double wave on some of the higher intervals.

I spoke above, of a Continued form of the wave, or a progress of the line of contrary flexures beyond the term of three constituents. It is upon the time of an equal wave of the second in a diatonic melody, that this extension is most conspicuous and useful ; if indeed it is in any other case admissible. For should some extraordinary expression of solemnity upon an indefinite syllable, require an unusually protracted quantity ; and should the time of the syllable not be exhausted, when the voice has passed through the three constituents of the double wave, it must necessarily be carried on in the note of

song, or it must continue in the flexures of the wave. If it take the course of the flexures, the bad effect of the former case will be avoided : nor will this multiplied repetition of the rise and fall, through this small interval of a tone, produce any positive or unpleasant impression.

I have ascribed an importance to the subject of this section, because it opens the way to one of the most useful principles in the art of reading well. I have all along kept in view, a distinction between the plain melody formed by the rise or fall of the voice through the interval of a tone, and a melody produced by the use of other intervals which endow the utterance with what was distinctively called Expression. There are very few readers able to execute this plain melody, in the beautiful simplicity of its diatonic construction. Some give constantly the rise of a third, or a semitone : or mark every emphatic syllable with one of the forms of the wave. Perhaps these faults arise from an attempt to give a greater degree of dignified expression or of variety to the simple melody, than an unpractised reader is able to accomplish by the management of the second alone : and in this attempt, some of the above mentioned elements of intonation are fallen upon, which produces a disgusting monotony. For the impressiveness of these higher intervals leaves such deep tracks upon the ear, that, when unduly employed, their identity becomes conspicuous and offensive. Whereas the simple interval of the second, like the smaller particles of speech, may be frequently repeated without producing a marked or tiresome impression : and the several forms of the equal wave of this interval throw sufficient variety into the diatonic melody, without destroying its characteristic plainness. They give time and dignity, whilst the simple rise belongs to a shorter quantity, and to a gayer kind of expression.

No one, who has not made an analysis of this subject, or has not had its peculiar effect distinctly pointed out, can be aware of the unpretending force, diversified succession, and severe simplicity of the diatonic melody, when conducted on the principles of the radical change formerly laid down ; and varied by the appropriate disposition of the single rise and fall, the direct and inverted wave, and certain modes of stress to be described in a future section. Upon the plain level of this melody, the

occasional expression of the higher elements comes with all the power which variety of impulse, and measureable contrast must necessarily produce. Whereas he who is constantly dealing out his semitones, thirds, fifths, and wider waves, allows no repose to the ear; and when the real occasions for their application occur, the sensibility to their contemplated influence is exhausted.



## SECTION XXIX.

### *Of the Equal Wave of the Semitone.*

THE chromatic melody was formerly described as consisting of the repetition of the radical and vanish of the semitone. But it was even then stated, that there may be a conjunction of the rising and the falling interval, for the purpose of giving a more remarkable impression of the plaintiveness of this symbol, and for adding length to the quantity of syllables. In the varieties of its construction, the semitonic is like the other species of the wave. Its direct, inverted, and double forms carry greater dignity and feeling than the simple rise; and at the same time furnish means for diversifying the current of the melody.

The mingling of the reverse forms of the wave, for this last purpose, is peculiarly necessary in the chromatic species; for the continued repetition of an impressive interval, and the predominance of the phrase of the monotone make it desirable to vary as much as possible the character of the wave, without destroying the essential nature of its plaintive constituent. Now this is effected, in a degree, by the above named appropriate disposition of the direct and inverted wave of the semitone. For these contrary movements have a difference of character which may be perceived by comparative trials; and a delicate and critical ear will be struck with the effect of a well ordered



variety of these elements, even though it might not be able to point out its causes, nor devise or repeat its approved arrangement.

It may be said on the subject of this and the preceding section, that whenever a good reader extends at will, the quantity of his syllables, and surely no one can read well without the faculty of doing this, he does instinctively give the intonation of these waves, in all deliberate and solemn utterance : whilst on the other hand, his voice assumes the simple rise and fall of these intervals, without the continuous flexure, in delivering those lighter and more energetic sentiments which naturally suggest a shorter time of syllables, and a more rapid pronunciation of discourse.

If such are the spontaneous and satisfactory efforts of the voice, it may be asked, why we should labour so deeply in an analysis, which, when compounded again into practice, will no more than meet the fulfilment of natural endeavor. I have said these points of intonation are accomplished by a good reader ; one in whom nature has established that admirable conformity between the spirit which identifies itself with the thoughts and feelings of an author, and the organ which executes the audible picture of its sympathies : by one, who, when he feels the uneasiness of error, will give even painful industry for its correction ; and who, in his self-directed labours, is unconsciously following the order, and effecting much of the purpose of scientific analysis and rule.

But how shall he find out or preserve his way, who has not this native grace of improvement ; who searches for right, without knowing what is wrong ; and who copies both the faults and merits of an individual example, instead of reaching forth, under the direction of well devised precept, to gather excellence by discriminative selection. It is to such a person that a development of the accidents of speech becomes indispensable. To him the connexions of system, the precision of definition, and the fulness of history afford those aids, which the keen economy of observation, and the winged thrift of genius may not require.

## SECTION XXX.

*Of the Wave of Unequal Intervals.*

By the term here employed I mean to denote that element of expression, which consists of lines of contrary flexure, but which is compounded of different intervals. Thus, if the voice rises through a second, and then in continuation falls through a third ; or if it falls through a given interval and rises through a different one, it is called the Unequal Wave.

It will at once be perceived that there is a direct and an inverted, a single and a double form of this element : and that the possible combinations of its constituents are so various, that the complex enumeration of them would be altogether useless, except the expression of each of their permutations could be pointed out. But I am not aware that the varieties of expression bear the least proportion in number to the multiplied species of this symbol. It embraces indeed wonder, positiveness and interrogation, in different degrees, according to the extent of the interval and the direction of its last constituent. I am not however able to assign to the unequal wave, any general characteristic of expression, except that of strongly marked scorn, and other feelings of a like nature and force. These sentiments, as formerly remarked, are in a slight degree conveyed by the curling of the equal wave, and even by the simple rising and falling fifth and octave, when there is much stress, or an aspiration laid upon their vanishing extremes. But the most striking sign of contempt consists in a wide variation of the constituent intervals of the wave ; especially if the wave is double, with the intonation strongly aspirated, or with a guttural energy on its final concrete.

This wave of unequal intervals is found in the representation of the higher passions of the drama, and in the peevishness and colloquial cant of common life : but it should be rarely used in that moderate temper which belongs to the greater part of written discourse. It has a vulgar earnestness and a quaint

familiarity which render it adverse to a grave or graceful design of speech.

If the expression of scorn is required in a current melody of dignified or solemn utterance, it is, when under the direction of feeling and taste, generally made by the proper application of stress and aspiration to the simple rise or fall of the third or fifth, which conveys a more moderate degree of this sentiment; at furthest, in such a case, the expression is not carried beyond the aspirated structure of the single-equal wave.

There is a peculiar use of the unequal wave, described under the head of Chromatic melody, which forms an exception to the above attribution of the sentiment of scorn to this symbol. I allude to its employment, for the purpose of chromatic interrogation. For in this case it is necessary to give, on the same syllable, an intonation both of plaintiveness and of the question; and this grafting can be accomplished, only by subjoining to the equal direct wave of the semitone, or to the first constituent of its inverted form, the rise of the third, or fifth or octave. But it is proper to remark here, that this, and other modes of the unequal wave, cease to be expressive of scorn, only by withholding the aspiration from them, and by avoiding a strong guttural stress on its last constituent.

There is likewise a form of the unequal wave, by which the cadence of a chromatic melody is made on one syllable: for in this case the voice rises through the interval of a semitone, and then in continuation descends concretely a third for the close. And it may be recollected that I said, this mode of intonation was not to be used, on account of its peculiar expression being unsuitable to the general character of repose which belongs to the cadence. From the nature of its constituents, it bears the sentiment of plaintive or querulous surprise, and consequently is admissible on the last long quantity of a chromatic sentence, only when this sentiment is set forth in its final word. If however the element be increased in force towards its close, and if it be aspirated, it will bear more conspicuously the expression of querulous scorn.

The wave, under every mode, requires more than any other element, the use of syllables of indefinite time. We may therefore comprehend why long quantities are necessary for reaching the full dignity of utterance, since these alone are

capable of bearing the wave : the dignity of expression being the result of the junction of the higher intervals, on emphatic words, and of the wave of the second or the semitone, in the continued current of the diatonic or chromatic melody. With the light of this principle, the reader may see on what defensible ground I formerly asserted, that the majestic movement of the first line of the second book of *Paradise Lost*, was shocked by the occurrence of the word 'state.'

High on a throne of Royal state which far—

All the accented syllables of this line except 'state' are of indefinite quantity, and will bear the equal wave of the second. The same is true of nearly all the syllables in the three succeeding lines of the passage : and with the exceptions here alluded to, the whole is admirably fitted, in its time, for the vocal representation of this magnificent description by the Never-equalled Poet.

From an inattention to this point of quantity, it often happens that poets use syllables of immutable time, in those emphatic places which call for the expression of the wave. The case in the following example, which was cited in the ninth section, will now be better understood.

And practised distances to cringe, *not fight*.

The sentiment of scornful exultation conveyed by the words 'not fight,' here requires a form of the unequal wave on each of these syllables ; but from the limitation of their quantity, it is impossible to apply these elements without the most disgusting departure from correct pronunciation.

In speaking of the various ascending and descending concrete intervals, it was shown that a similar, though diminished effect of intonation was produced by the leap or change of the voice, from the radical of any concrete to the top of its vanish, without passing through the intermediate space. Now since the wave is only a junction of the concretes of its constituents, it might naturally be supposed that some expression analogous to the effect of a concrete wave, may be produced by



radical changes to the extremes of its flexures. A correspondence of this kind may be displayed on some of the forms of the wave. Thus in the case of the words ‘not fight’ given above, some approximation may be made towards the required expression of the continued concrete, by giving the particle ‘not’ at a discrete fifth above the line of the current melody; then returning discretely to that line on ‘fight;’ and subsequently rising from it with the rapid concrete of a third: thus producing a kind of discrete imitation of the direct-double-unequal wave of the fifth and third. For if we suppose the intonation of ‘cringe’ to be on a line with the current melody, and a concrete to be carried from its place, through the points of the rising and falling discrete fifth above mentioned, it will, with the rapid vanish of the third, form such a wave. This mode of discrete intonation by the higher intervals, comes much nearer to the expression of contempt designed by the exultation of Satan, than can possibly be reached on the triad of the cadence, to which the voice is prone, in this case, from the short time of the syllables, and their position at the close of a sentence.

Another example which was given in the ninth section, may serve still further to illustrate this design to imitate, by means of radical changes, the full expression of a wave of equal intervals, when a limited syllabic time, renders its prolonged movement impracticable.

Faithful to whom? To thy rebellious crew?  
 Army of Fiends, *fit body to fit head.*

The words here marked in italics convey the sentiments of admiration and scornful compliment, and would be intonated by a good reader, with an alternate skip of the radical pitch through the rise and fall of a fifth: for in this way only, that is by marking the extremes of intervals, which, upon extendible syllabic quantity would be given as a wave, can that open eye of wonder, and snarling of scorn, be substitutively executed. But even with all the assistance from the radical skip, the reader, if he possesses the soul of elocution, must still find it imprisoned within these words.

I wish here to recall the attention of the reader to the subject of syllabication, which was treated of in the fourth section. It was there said, that the various accidents of syllables are governed by the function of the radical and vanishing movement. I then hinted that the flow of syllabic sound is not always limited by the extent of the upward and the downward concrete ; but that the impulse is practicable upon another form of pitch. We are now prepared to hear that the unbroken current of the voice, may be carried through the contrary movements of the wave, without destroying that singleness of impression which constitutes one of the characteristics of a syllable.

I said enough on the subject of elemental utterance, to make this matter explicable by a few words. The wave is a continuous sound, and consequently affords no opportunity for the silence-breaking outset of a new radical, which, with its following vanish would produce another syllable. For it was shown that an interruption of the concrete, whether made wilfully by pause, or necessarily by the occurrence of an abrupt or an atonic element, is unavoidably the end of one syllable, and the preface to the beginning of another.

After the description which has thus far been given of the individual functions of the speaking voice, we may take a more comprehensive view of the subject, by recapitulating the account of these elements as they appear in the connected current of discourse : and thereby show them in the joined relations of synthesis, as well as in the separate individuality of decomposition.

We speak to communicate our ideas, and, if the difference of the cases is allowed, to express our feeling or sentiments. Language should therefore have a set of symbols for each of these modes. But as it is difficult, if not impossible, to draw a definite line of distinction between mere thoughts and what are called sentiments ; so the oral symbols which respectively represent them can not be absolutely disjoined in arrangement. I have, however, endeavoured to give a practical division founded on some of their obviously dissimilar phenomena.

That which I call the plain diatonic melody, consists of a simple rise through the concrete of a tone, varied by the occasional use of the downward tone ; with a radical pitch playing in its several phrases ; and a termination of the melody by the

descent of the cadence. The smoothness and beauty of delivery, in this case, is largely dependent on that construction of the radical and vanish which displays a full and well-marked opening of the concrete and a gradual diminution of its force. These are the elements employed and this their disposition, for reading plain narrative or description : and I am sure that if the definitions of astronomy, title deeds of property, and gazette advertisements, be not read in this style of intonation, the effect will be unsuitable to their passionless thoughts.

In the above cases, as well as in the wider range of subject to which the diatonic melody is applied, the movement is supposed to be with a tripping step and the quantity not unusually prolonged. If however the thoughts should have some bearing of importance, and call for more impressiveness, an increase of quantity in the accented syllables, together with a general slowness of the time will be assumed : the concrete still continuing in a rising though protracted form.

Should this deliberate movement be further urged by the influence of sentiments of solemn dignity, the melody will assume the form of the mingled progression of the direct and inverted equal wave of the second. There is much of the church service which should be read with this plain protracted intonation. It conveys in full, the sentiments of august composure and solemnity and veneration. The proper management of these contrary directions of the wave gives sufficient variety to the melody : whilst it avoids those forceful impressions of higher intervals of the scale, which would break the stately ease and designed simplicity of the movement. I believe the account of this last style of melody, includes the true history of the production of graceful dignity of voice ; which is in vain attempted through the breadth of 'o's and 'aw's in mouthing ; strong percussive accents with long pauses ; the waves of wide intervals ; and that heartless affectation which passes without motive or rule, in unexpected transition from the strongest cushion-beating emphasis, or stage vociferation, to the attempted significancy of a mysterious whisper.

Though the above forms of melody are here represented as being used independently of any other mode of intonation, yet it must be understood that the rise and fall and wave of the second which give them the diatonic character, are almost uni-

versally found mingled with the symbols of higher expression. For these melodies may happen to contain a question ; which must be made, according to its grammatical construction, or to the sentiment which dictates it, either with a thorough or partial use of the intervals of the third or fifth or octave. And though they may embrace no interrogation, yet some words which convey a sentiment of surprise, or positiveness, or scorn, or serious or mirthful admiration, may call for distinction above the rest. Now the emphatic syllables of such words are so distinguished by the wider rising and falling intervals of the scale, and by the various forms of the wave : this effect being produced either by the concrete or the discrete mode of intonation.

There is another interval of the scale,—the Semitone, which is used for the emphatic distinction of single words, and which conveys a sentiment of complaint or pity or tenderness or submissive supplication. But the more general use of this semitone is upon phrases, sentences, and even throughout the long track of discourse. This is called the chromatic melody. It too has its structure of a simply ascending concrete, which gives the least degree of the sentiments of this melody, on its least prolonged quantities. It has also the higher wrought and more dignified degree of expression, belonging to the equal wave of the semitone, in the variations of its direct and inverted, its single and its double forms. Some parts of the church service which contain the words of complaint, penitence, and supplication, call for this solemn wave of the chromatic melody.

There are other elements which serve to make up the phenomena of correct, elegant and expressive speech. These were considered under the terms, quality of voice ;—melody or the run of radical pitch on its different phrases ;—pauses and the proper phrases of intonation to be used at them ;—and the grouping of the voice, or the means of impressing on an auditor more definitely the syntactic relation of words and phrases, by means of pause, emphasis, and the variations of time and force.

This summary includes the elements which have thus far been enumerated. There are some important functions, yet to be described, which will furnish us with the symbols of other sentiments.



## SECTION XXXI.

*Of the Intonation of Exclamatory Sentences.*

IN describing the nature of the downward concrete and the wave, it was said that these movements are variously expressive of surprise and admiration. Now as these and like sentiments are embraced by that form of speech which grammarians have called Exclamation, I shall endeavour to give an outline of some of the principles that seem to govern the intonation of Exclamatory sentences.

I have already said that—besides a mere admission of the existence and importance of such a thing as intonation in the art of speaking, our institute of Philology has never given any other analysis or notation of its specific modes, than that which seems to be signified by the common ‘notes’ of Interrogation and Exclamation. But as these notes merely imply some undescribed peculiarity of voice, without being grounded on any analysis or rule of intonation, they can be considered as no more than grammatical symbols to the eye. This indefinite state of knowledge with regard to the intonation of these forms of speech, has been further confused by the vague uses of their grammatical signs. For we find the note of interrogation often applied to sentences which are really interjective or argumentative appeals: and which by the light of analysis we now possess may be shown to be strictly exclamatory.

Had the reader been prepared by previous description of the downward concrete and the wave, I would have shown in the section on interrogative intonation, that some questions are made by these movements of pitch. But even this does not form an exception to the principle that purely inquiring interrogation, if I may so call it, is made by the rising intervals alone: for I am here to show, after what has been said of the reverse expression of the falling intervals, that whenever a question employs the direct wave, or the downward movement, the in-

terrogative character is lost in the sentiments which require these adopted intervals.

Interrogations are——Purely Questionary ;——Appealing ;——Argumentative ;——Exclamatory ; and——Imperative.

The Questionary requires the rising intervals in the thorough, or in various degrees of the partial application, as set forth under the proper head of Interrogative intonation. Some of the others denote on the part of the interrogator, that positive belief upon the subject of his own question, which calls for the use of the downward concrete or the direct wave. I have therefore included these forms of interrogation under the head of exclamatory sentences ; which we shall see require the above named elements of pitch. It will be difficult however to draw a precise line of separation between those forms of speech which require the pure interrogation of the rising intervals, and the interrogative application of the downward positive movement. And though we may not be able to make the points of their near resemblance, a matter of exact discrimination, this is no reason that we should not describe and arrange their manifest distinctions.

The Appealing Question. The spirit of this interrogatory is, in most cases, that of positive conviction. For on one ever appeals but with the expectation, that judgment will be given in his favor. The appeal is put in the questionary form, either with a persuasive deference, or else with a cunning sophistry to set the required decision within the view of the person appealed to. Now the real or the feigned conviction on the mind of the interrogator produces, in questions of this sort, the same downward intonation that positive declarations require. I say the reference of these questions is made, rather for confirmatory approbation than for the unbiased voice of judgment ; and this is more clearly exhibited in the forms of poetical appeal to the decision and will of heaven. For surely this implies the highest assurance of conviction on the part of the interrogator. Thus in the fourth act, and second scene of *Julius Cæsar* Brutus says,—

Judge me ye Gods! *Wrong I mine enemies!*  
And if not so, *how should I wrong my brother!*

Here are two appealing questions put, not in the doubt of inquiry and with anxiety as to a reply, but with the full expectation of a favorable judgment. The words in italics therefore properly require throughout, the downward intonation. In truth, the spirit of the expression is exclamatory.

The Argumentative or Conclusive Question. The object of this question is not that of inquiry ; for it is generally addressed upon data, that make the phrase, though grammatically an interrogation, rather a logical conclusion from premises that have been asserted or admitted. Thus Antony over the body of Cæsar says—

He hath brought many captives home to Rome,  
Whose ransoms did the general coffers fill:  
*Did this in Cæsar seem ambitious!*

Or as more strongly marked in this :—

You all did see that on the Lupercal,  
I thrice presented him a kingly crown,  
Which he did thrice refuse. *Was this ambition!*

These arguments, for so I call them, though addressed with the words of a question certainly can not be received in the spirit of one. That spirit is really inferential that Cæsar was not ambitious. In short these cases belong to what may be termed an interrogative syllogism, of that species which logicians call an Enthymeme, or an argument of two propositions only, the minor and the conclusion : thus—

Cæsar thrice refused a kingly crown;  
Therefore Cæsar was not ambitious.

The syllogism being completed by the addition of its major term : thus—

An Ambitious man would not refuse a kingly crown;  
But Cæsar thrice refused a kingly crown,—  
Therefore Cæsar was not an ambitious man.

Such being the positive character of these phrases, it follows from the rules we have laid down, that they should receive the intonation of the falling intervals; the very opposite to those which denote interrogation.

I am aware that according to the present method of reading by the mere brutal instinct of the voice, these questions might be given with a thorough application of the rising intervals. But in this case the intonation would be apt to assume the sneering expression of the double-direct or single-inverted wave, in order, by its ironical effect, to endue the inquiry with the force of a real negation.

And here I may take the opportunity to point out one of those many relations which our present analysis will hereafter develop, between the arts of grammar and rhetoric and elocution. I have endeavoured to show that these phrases are in meaning, positive declarations of belief in a fact. But by a figure of speech, this meaning is conveyed in the form of a question: and questions are generally taken as words of doubt. Consequently in cases like the above examples, where the voice has some positive meaning to express, it must annul the usual power of the grammatical question. The means for effecting this, is by the use of the most emphatic degree of the downward intervals; for the expression of these is furthest removed from that of the rising interrogative voice. And this instance may serve to pre-signify the kind of vocal and grammatical contrariety, which the future cultivators of elocution will be called upon to analyze, and to reconcile by the extended powers and resources of their art.

**The Exclamatory Question.** As I have said above that the appealing question is exclamatory, so it may be said here that the exclamatory question embraces an appeal. The only ground for distinguishing them, is that the exclamatory phrase appears to be more removed from the nature of a question than the appeal, by its seeming the less to require an answer.

In Shakspeare's *Richard II*, the King, in that celebrated descant on the state of princes, says:—

I live with bread like you, feel want, taste grief,  
Need friends,—subjected thus,  
*How can you say to me, I am a King!*



The words in italics do not require an answer, for they contain the sentiments of reproof, displeasure, surprise and conclusive denial; but not inquiry: and therefore are properly expressed by the use of the downward concrete and the direct wave.

The Imperative Question. There is such a thing as overbearing impetus in feelings as well as in physical momentum; by which the expression that belongs to one thought is carried into another, which under different circumstances would not admit of that expression. Now the case of intonation in an imperative question seems to be one of this character: for there are here two sentiments in the mind of the speaker,—Command and Inquiry; and these are in immediate connexion with each other. But the zeal of the question is exhibited in the vehement desire for an answer; and this desire displays itself in the earnest authority of command. By this transfer the command assumes the whole of the energy of the case; and seeming to forget, if I may so illustrate the subject, the expression that is due to the sentiment of the question, it throws the positiveness of the imperative sense over the whole. This is exemplified by Macbeth's consultation with the witches.—

*Witches.*

Seek to know no more.

*Macbeth.* I will be satisfied. Deny me this,

And an eternal curse fall on you. Let me know,

*Why sinks that caldron, and what noise is this!*

The eagerness of Macbeth is here changed to anger, at the prospect of disappointment. This anger assumes the intonation of command in the phrase 'let me know,' and the strong downward intonation which this command requires, is by the impetus of feeling, if I may so speak, continued throughout the two succeeding questions. A good reader will, on trial, at once admit the propriety of this positive intonation; for let him, after the angry demand, immediately give to the questions the rising intervals of interrogation, and not only will the defect of force be apparent, but the violent contrast of expression, will be even ludicrous. Yet without the overruling of this imperative sentiment, the questions would naturally take the interrogative intonation; for they contain a real inquiry.

In the above instance the question has the previous command expressed ; but in all cases where it is wanting we are to understand the phrase,—‘*tell me,*’ or some equivalent imperative.

There are other sentiments requiring the downward intervals, that may be embraced in the grammatical form of interrogation. But I have given examples enough of this kind of combination, to furnish the means for a complete distinction and classification of all its modes.

Perhaps one of the reasons why questions of the above character drop their proper interrogative intonation, is that the grammatical phrase sufficiently indicates the inquiry, and thus allows the associated sentiment to assume the downward interval.

Upon the subject of the common Note of interrogation, I have to remark that as most questions are signified by their grammatical construction, and as this symbol in most of its places sets no rule for intonation, it may be regarded as useless in all the form of interrogation, except the declaratory, and some phrases that without it might be mistaken for imperatives. In these the mark placed at the end, or better, at the beginning of the question, would be definite in its direction, from such sentences always requiring the rising intonation. That the common mode of applying this symbol must confuse a reader who pays regard to it, is a fair conclusion from its being used indifferently in cases which require, as we have now learned, totally opposite modes of intonation.

Having considered the various kinds of interrogation, let us survey them in recapitulation.—

Questions in their grammatical construction are either declarative or interrogatory : and with regard to their meaning, they are made as a real inquiry, or as an indirect expression of belief, through the figurative doubt of interrogation.

Declarative questions, are elliptical sentences, whose interrogatory clauses being omitted, the question must be signified by the application of the wider rising intervals to every syllable. Of this, examples were given in the sixteenth section. But there are declarative questions which partake so much of absolute assertion, that they may be uttered with only a partial use of interrogative intonation : as in the following of Hamlet to Polonius :—

My lord, you play'd once in the University, you say?

There is a doubt in this sentence, and as such it is marked by editors: yet the phrase 'you say' puts the question, if such, as of a thing that was known before. In a similar form of address Hamlet says to the player:—

You could, for a need, study a speech of some dozen or sixteen lines, which I would set down and insert in't?

Declarative questions vary in extent, from the usual length of sentences to that of a monosyllable, as was shown in the fifteenth section on the interrogative intonation of the word 'yes.' A similar use may be made of 'no,' and of the single state of most of the other parts of speech.

The purely Interrogatory constructions were described in the sixteenth section. Their grammatical forms are various, and their spirit, of several degrees and kinds.

Questions of Real inquiry, are all those embraced by the declarative and interrogatory divisions. They bear a thorough or a partial intonation, according to the structure or spirit of the phrase.

Those Figurative questions, that denote belief and not doubt on the part of the interrogator, are included under the present head of exclamatory sentences; and as we have seen, call for the downward intervals or the wave, such as I now proceed to show proper Exclamations require.

Many exclamations may be regarded as elliptical sentences. The design of these broken phrases is to effect a quick and forcible expression of thought or feeling: and as this is done with a brevity of style, which sometimes might not be a full indication of the sentiment, it is necessary to employ the additional means of intonation. And hence arises the structure and characteristic expression of Exclamation.

The shortest exclamatory, like the shortest declaratory-interrogative sentence consists of a monosyllabic word, and this may be any of the parts of speech, if perhaps we except the article, conjunction, and preposition; the interjection being the

most common. And this may serve to set the power of intonation in the strongest light ; for thus it seems to be the art of speaking almost without words. From the monosyllable, the exclamation varies in extent through degrees of the ellipse to the full syntax of a sentence. Though there are few that are not curtailed by the force of passion. Exclamations might then be arranged according to their structures,—as grammatically imperfect, or as complete. I shall class them by the sentiments that prompt them.

When I say that exclamatory sentences generally, if not always, bear the falling intervals or the wave, it must be understood that the extent of these intervals is in proportion to the force of the sentiment. Thus the following interjective reflection, from its moderate temper, might require no more than the downward second or its direct wave.

O withered truth !

Whilst the energetic emphasis of Hamlet's revengeful exclamation at the atrocity of the king,—

O villain, villain, smiling damned villain !

should receive the deep and forcible descent of the octave.

Of the many kinds of exclamatory sentences, I shall only notice,—The Admiring,—The Plaintive,—The Scornful, and—the Imperative ; since these illustrate the several modes of intonation which this style of composition requires.

The Admiring Exclamation. Admiration is a sentiment felt upon new perceptions or thoughts. Now the newness of objects, or of the thoughts of them, involves in a degree the sentiment of inquiry as to their quality or nature ; and thus seems to call for the use of the rising intervals. But this sentiment has not quite the force which would require a verbal or a vocal question : whilst, at the same time, there is in the character of Exclamation, a positive conviction of the high importance of the object of Admiration. It is from embracing these two sentiments that the admiring exclamation calls for the direct wave or union of the rising and falling intervals ; the positive character of the exclamation by the downward course of the



last constituent, predominating over whatever there may be of inquiry that gives occasion for a previous rise. Let us take as an example, the following description of the assembling of the fallen Angels at Pandemonium :

So thick the airy crowd  
Swarm'd and were straightened; till the signal given,  
*Behold a wonder!*

Here, of the words in italics, the syllables 'hold' and 'wond' require the direct wave of the fifth, and by their indefinite quantity freely admit of it.

The Plaintive Exclamation. I have shown in the eighteenth section, in what manner a plaintive interrogation may be made, by the junction of the semitonic expression with the wider upward intervals. The plaintive exclamation is produced by the rise of the semitone continued into the descending third or fifth or octave, according to the force of the sentiment; thus constituting a direct wave of unequal intervals. The direct wave of the semitone and fifth is the proper intonation, for the accented syllables of the following plaintive exclamation of Macduff:

O Banquo, Banquo,  
Our royal master's murdered!

The Scornful Exclamation. It was said in the thirtieth section that Scorn, according to its degree, is expressed by the simple rise or fall of the wider intervals, or by the various forms of the wave, when made with an aspirated or a guttural voice; the lighter degrees of expression, or the simple rise and fall being appropriate to the sneer, and the stronger, to the deepest contempt and execration. Now when such sentiments are contained within short emphatic sentences, it constitutes what I have called the Scornful Exclamation; as in the following, from the *Merchant of Venice*.

*Bassanio.* This is seignor Antonio.  
*Shylock.* How like a fawning publican he looks!

The sentiment of this last line will be properly expressed, if the syllables in italics receive the unequal wave of the rising fifth and falling octave, under a slight degree of guttural aspiration : whilst the other short quantities of the sentence are uttered in the falling fifth, with the like aspiration.

The Imperative Exclamation. An imperative sense universally requires a downward interval or a direct wave. Other elements, such as the modes of stress, aspiration, and guttural emphasis, to be spoken of hereafter, serve to mark the degrees of force or authority in the command. The following exclamation of Macbeth to the Ghost of Banquo, requires the downward fifth or octave throughout ; according to the energy the speaker may think appropriate to its delivery.

Hence horrible shadow,  
Unreal mockery hence !

But I need not pursue this subject further. Exclamations are but forcible expressions ; and there may be as many kinds as there are modes of feeling and thought. Thus every mental energy and passion may be found illustrated in composition. I have by these few instances, shown the grounds of classification : and when hereafter elocution shall, upon the foundation of our present analysis, be raised into a science, and so cease to be, as it is now, a mere animal function, all those things whose end I but perceive, shall be in fact accomplished by others.

Upon the subject of Interrogation and Exclamation, it is to be remarked that in some cases, emphatic distinction may require the use of the downward interval or the direct wave, among the rising intervals of interrogation ; and a rising interval, among the downward concretes and direct waves of exclamation. The contrasts of intonation in such instances constituting one of the characteristics of what is called emphasis, or an impressive designation of single words.

## SECTION XXXII.

*Of the Tremor of the Voice.*

IF the reader has borne in mind the definitions contained in the first section of this essay, he must be aware that the functions of pitch thus far analyzed are, severally, phenomena of the concrete and discrete scales, and of the chromatic. I design to speak now of an element of expression derived from the Tremulous scale.

This scale consists of a rise and fall through the octave, by the successive steps of that particular play in the throat which in common language is called gurgling. I have not invented the term Tremor as significative of a mode of the voice: but I here first give an analysis of the function, and decree its systematic arrangement, as conducive to the establishment of principles, for the attainment of correctness and elegance of speech.

In treating of the tremulous scale, I gave a very general account of its construction. I must now be more particular.

It has more than once been affirmed in this essay, that every effort of the voice is necessarily made through the radical and vanishing movement: and I hope it has been satisfactorily shown, that the audible characteristic of the several intervals of the scale may be distinctly recognized, even on the shortest immutable syllables.

Since then each of the tonic and subtonic elements does, even in its shortest time, always pass through the concrete, it follows that, however quickly successive any one of them may be repeated, each impulse of the iteration must be a concrete interval. If therefore the tremor be made on any of the above named elements or their syllabic combinations, the successive constituent impulses of that tremor will each consist of an

abrupt radical and of a rapid concrete of some one interval of the scale. Taking the name of the interval as a designation, there may be a tremor of the semitone, of the second, of the third, of the fifth and of the octave. That is, each of the successive impulses may rapidly rise or fall through those intervals respectively. In this case the impulses are supposed to be continued on the same line of radical pitch, the vanishes rising therefrom to their required heights; but it is easy to understand that whilst the iteration of the tremulous impulses is going on, through any concrete interval, for instance the second, the radical pitch of these concrete seconds may be carried upward or downward through the whole compass of the voice, This change of radical pitch in the tremulous movement is made in two ways.

First: A given number of these iterations of the tremor, or Tittles, if I may so call its several impulses, are continued on one line of radical pitch. A change is then made through the upward interval of a tone. On this line the tittles are again continued; and thus by an alternate succession of iterations on a line, and changes by proximate degrees, the voice may ascend through the whole extent of the scale. In this way it is manifest that the rise is merely through the diatonic scale of song, with the addition of the tremor on each of the stated places of the scale.

Secondly: The ascent through the scale may be made by each tittle of the tremor being taken successively above the last, at a less distance than the tone or even the semitone. In this way, by a gradual rise of the radical pitch, the whole compass of the voice may be traversed.

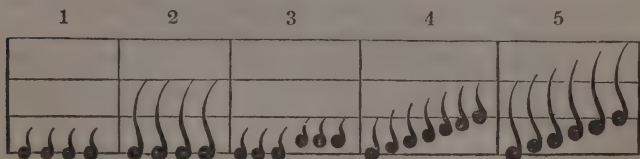
We have no means for ascertaining the extent of space between the tittles, in this rise of the tremor. It may be inferred that it is considerably less than a semitone: For if we make a tremulous movement through any cognizable interval, for instance an ascending third, and this may be accurately done by first familiarizing the ear with the effect of the simple interval in its skip from first to third, and then comparing it with that of a rise by the tremor—it will be perceived, that in this gradual ascent, the number of tremulous steps greatly exceeds five; for that is the number perceived in executing a third, through the degrees of the semitonic scale.



When the tremulous movement is made through the descending scale, whether by the diatonic progress and iteration on a line, or by the gradual change of minuter intervals, the concrete of the tittles takes likewise the downward movement: for the expression designed by the downward course of the radical pitch of the tittles, seems to require a like direction of the concrete. Nor have I been able to perceive, in the ordinary uses of the voice, that the radical pitch of the tremor, and its concrete, move in contrary directions to each other.

In order to illustrate the nature of the tremulous movement, I give below a diagram of its various modes just described. In the first and second bars the tittles are represented on one line of radical pitch: the concrete ascent of each tittle in the first being a tone, and in the second a fifth. The third bar shows the first method by which the tremor ascends, upon the steps of the diatonic scale. The fourth and fifth bars show the second method of rising by a gradual progress through intervals less than a semitone; one having the concrete pitch of a second, and the other that of a fifth.

This exemplifies only the upward course of the radical pitch and of the concrete: but the concrete may descend when the tremor is on one continued line; and I have said above, that whilst the radicals of the tittles descend, either by the steps of the diatonic scale, or by the gradual change of minute intervals, the concretes of the tittles do likewise descend. Now this condition of the tremulous movement, is illustrated by taking the diagram from right to left in an inverted position.



The tremor then consists of a number of impulses of sound, of the least assignable duration, which nevertheless do pass concretely through some one interval of the scale, and which rapidly succeed each other. These impulses being either itera-

tions on the same line of pitch, or a series of sounds rising or falling through the scale by very small discrete intervals.

That the tremor is so constructed, may be learned from experiment; for it will show that the tremulous voice may be continued on a line, without rising or falling; and that it may be carried to the lowest audible pitch, or to the highest reach of the falsette. And further, that the constituent tittles of the tremor, however momentary, do pass rapidly through concrete intervals may be proved by trial: for the plaintive effect of intonation, which is producible only on a semitone or minor third, may be heard on every part of the ascending series of the tremor, through the whole compass of the voice; and in like manner the plain effect of the tone, and the interrogative expression of the third or fifth or octave, may be given to this rising series. Now as the iterated skip of the ascent is not a semitone, or tone, or other higher interval, but a very minute space as was shown above, it is plain, the effects here spoken of are not produced by the minute skip, but by a momentary transit of the concrete tittles through those intervals respectively.

It was upon the ground of this mode of progression, so different from the concrete movement and from the diatonic steps by tone and semitone, that I ventured, in the first section, to designate this discrete and chattering variation of pitch, the Tremulous scale.

As it has been stated that this tremulous function may be exhibited either in a rising or falling movement, it is scarcely necessary to add the conclusion that it may be carried through the compounded form of the wave. Let us then after the analogy of our preceding nomenclature, call the minute spaces of the rise and fall of the series of iterations,—the Radical pitch of the tremor: and the rapid concrete of each of the successive sounds or titles,—its Concrete pitch.

The uses and power of the tremor, in the work of expression, can be better explained after a prefatory consideration of the functions of Laughter and Crying.

The pure and unpronounced act of Laughter consists in the use of the tremulous scale, both in its concrete and radical pitch. Its concrete pitch may be any of the intervals of the scale, except the semitone or minor third; whilst its radical pitch may

either be continued on the same line, or it may rise or fall through the whole compass of the voice. In speaking of the application of a concrete interval to immutable syllables, it was shown that the space of the rapid transit though immeasurable directly as an interval of the scale, may yet be ascertained by its characteristic expression : and the reader may practically apply the principle here, in discriminating the intervals which are used in laughter.

If the concrete pitch be that of a tone, and the tremor be continued in the same line of radical pitch, the function may indeed bear the name of laughter, but it will be a mere phlegmatic chuckling in the throat. Whilst the concrete is still in the tone, if the iterations of the radical pitch rise and fall alternately through the scale, the expression of the laugh will become more sprightly and colored. When the third or the fifth is used in the concrete pitch, and the radical iterations are carried through the wider intervals of the scale, it gives the utmost indication of vivid excitement.

Laughter is generally made on one of the tonic elements, but it may be executed on the subtonics, and even on the atonics in a whispering breath. It is made on all places within the compass of the voice, but it generally affects the falsette. Supposing the quality of the voice to be given, that mode of laughter will be most agreeable and varied and spirited, which is made by a tremor of well accented tittles, distinctly separated from each other ; with a concrete pitch, moving in succession, through every interval except the semitone ; and playing through the whole range of the vocal compass, in its radical pitch : the expression being still further marked by variations in force or loudness, as the tremor rises and falls by these radical changes.

Crying is made by a movement through the simple rise or fall of the semitone, or of the minor third, or through the direct or inverted wave of these intervals. No other interval is used in this function : The act of crying has two modes : it may be in the concrete or in the tremulous scale. Infants cry in the first manner, by a mere protracted quantity on some tonic element. It is a long time before the tremor is heard in their voice. The first step towards it, is in the convulsive catch of sobbing. By degrees this increases in frequency, and

the cry becomes at last composed of the rapid iteration of the tremor.

The tremulous function of crying, like that of laughter, consists of a concrete and of a radical pitch. That is, its rapid concrete semitone or minor third may successively ascend or descend through the whole compass of the voice, by such minute discrete steps as were ascribed to the radical pitch of laughter. The tremulous mode of crying gives the strongest characteristic of this function.

It sometimes happens that children whilst crying in the tremulous movement, do from some momentary change of sentiment, and without a cessation of the tremor, pass into laughter. Here a cheerful sentiment necessarily produces a change of the concrete from the semitone or minor third to the second or other higher interval. And in a paroxysm of hysteria, the transition between these different means of gay and plaintive expression are so frequent and rapid, that the hearer is often at a momentary loss, to say which function is in operation. Under these circumstances a person may properly be said to laugh and cry in the same breath.

The association of the semitone or minor third, whether in their simply prolonged or their tremulous form, with the sentiment of distress is so close, that though crying may have ceased, still if the feeling of distress has not passed away, there is a kind of mental hiatus in the attempt to return even to the diatonic intonation of speech. The chromatic will rather be assumed. There are persons, who, for the sake of sport or fraud, play the part of crying. If they are habitual mimics, and have flexible voices, they may deceive. But nature will often be honest, where humanity, her counterpart, would be the knave. Crafty men are so well aware that the lips may mar the underplots of the heart, that they are obliged to guard the ruling passion by silence. When mirth or sorrow is in the mind, it is hard to restrain its habitual expression. He who would be to others an unsuspected hypocrite in his voice, must mask even his sentiments to himself.

After the foregoing account of the use of the tremor upon single elements, in the functions of laughter and crying, it is not difficult to foresee the effect of its application to syllabic utterance in the current of discourse.



When the semitone of speech is given under the form of tremor, it increases the force of the expression which belongs to the concrete of that interval, in the chromatic melody. For since crying is the ultimate voice of distress, its tremulous characteristic is adopted as the means of marking an intensity of feeling, in the excess of complaint and grief, and the ardor of distressful or tender supplication. Tremulous speech is the utmost practicable crying upon words.

To exhibit the engrafting of the tremor on a syllable, let the reader pronounce the word 'name,' in tremulous movement through the simple rise or fall, or the wave of the semitone. He will perceive that the tremor is made equally on the tonic, and each of the two subtonic elements which constitute the syllable.

The tremor on the semitone may be used partially in a sentence, to mark emphatically the plaintive sentiment of a single word: or it may be used in continuation throughout portions of discourse. If it is worth while to give a term to this last named condition of speech, it may be called the Tremulous chromatic melody. The following stanza, in which the tremor of age is supposed to be joined with that of supplicating distress, may, when read with the coloring of dramatic action, afford a proper example of this melody.

Pity the sorrows of a poor old man,  
Whose trembling limbs have borne him to your door,  
Whose days are dwindled to the shortest span;  
O give relief and heaven will bless your store.

Here the tremor of the semitone may be applied to every syllable capable of prolongation, which is the case with all except those of 'pity' and 'shortest:' but even these may with pardonable extension, receive it. For it must be understood, that some particular purposes of expression allow a breadth of quantity on those immutable syllables and unemphatic and unaccented words, which in dispassionate utterance would bear but the shortest time.

The occasional use of the tremor of the semitone upon individual words will be noticed in the future section on emphasis.

When the tremulous function is made through the second,

third, fifth or octave, or through the wave of these intervals, it joins the sentiment of derision, mirth, joy or exultation to that of interrogation, surprise, command, or scorn, conveyed by the smooth concrete of those intervals. In short, it is the introduction into speech of what is transferable in the function of laughter ; and it adds thereto all the meaning and force of its satisfaction.

The tremor on these higher intervals is used principally for emphasis, as will be illustrated hereafter : though in playful discourse, it is sometimes heard in continuation on more than one syllable, and occasionally even on short sentences.

There is a use of this laughing tremor, if I may so call its execution on these intervals, which deserves notice. I mean that hysterical exclamation which is heard in the higher scenes of the drama. In this case, the tremor seems to be subservient to all species of expression : for there is scarcely a passion, whether of joy or suffering, in which it may not be effectively used. One can understand readily why this vehement expression should mark the excess of those feelings which are naturally connected with laughter : but it is not at once manifest why nature should so reverse the ordination of her signs, as to give the concrete tremor of the second or of higher intervals, to those sentiments which in cases of less excitement instinctively receive the semitone or the minor third. Let us try to explain this matter.

The occasions on which this hysteric laugh is employed, are those of the highest possible intensity of distress. Now by the ordinary rule of moderate expression, the tremulous semitone should be used : and with this indeed the expression does generally begin. But as the feeling increases in vehemence, the mind becomes so far overruled by its excess as to dis sever the natural association : and the voice, giving way to the mere habit of employing the higher intervals for keen expression, leaves the concrete tremor of the semitone or minor third for the more free expansion and piercing energy of the third or fifth or octave. This is the reason why in hysteria, which is usually brought on by distress, or other strong emotions, the ordinary course of expression is averted ; and whilst the more moderate forms of this disease are signified by the semitonic intonation, its higher gusts are characterized by an idiotic

laugh. On the whole, although this last mentioned mode of expression, when under skilful management and taste, is often both proper and effective, yet as it is generally accompanied with considerable grimace, is a positive thing, and can be well heard in the remote corners of the gallery, it is too apt to be contrived for gathering in the eyes and ears of an audience, by actors, who without feeling its rarely appropriate occasions, are yet by accident master of its mechanical execution.

It requires more than common facility of voice to perform the tremor with precision and elegance. Its full efficacy and most graceful finish is accomplished by giving it the greatest number of breaks or iterations of which the assumed interval is susceptible ; by making the constituent tittles in fluent succession, with a distinct accent, with equal time and force, and with a ready power of ascent and descent through the scale.

As the tremor may be applied to all the intervals both ascending and descending, and to their combination in the wave: and as these elements bear different kinds or various degrees of expression, it follows, that the character of the tremor may appear under other modifications than those of joy and sorrow. For if it be set upon a downward interval, say of the fifth, the expression will be of a graver cast than when heard on a rise of the same extent : and on the upward second it will have less gaiety than belongs to the tremulous fifth or octave.

After the preceding view of the simple intervals, and of the tremor, the reader may be able to foresee and to recognise the effect of any other detailed combinations. If with all I have said he can not do this for himself, it would be to no purpose to do it for him. It is an agreeable office to stand prompter to a pausing, yet a ready comprehension : but it is a groaning service to be obliged to push on a feeble or unwilling intellect to the last syllable of its part.

## SECTION XXXIII.

*Of Force of Voice.*

THE words loud and soft, strong and weak, are used in common language, to signify the variations of sound comprehended under the generic term at the head of this section.

This subject may be set in two aspects. Force of voice may be applied to phrases, or to one or more sentences, in order to distinguish them from adjacent phrases or sentences in discourse. It may likewise be limited to single words, to syllables, and to certain parts of the concrete movement, to distinguish them from other words and syllables, and from other parts of the concrete. The detailed history of this limited application of force, will be given in the six following sections. Under the present head I speak transiently of its use on phrases and sentences.

Writers on elocution, and school books on the art of reading, give general rules for enforcing and reducing the voice, on continued passages. It is not necessary to swell the bulk of this volume, by transcribing them. It may not however be useless to run over the process by which a philosophical inquiry might be conducted, for the purpose of reaching the principles that govern the association of certain degrees of force, with the circumstances of the speaker, or with affections of the mind.

From the wide reach of an intense exertion of the voice, there is an obvious propriety in its employment, when distance is pictured in discourse. The indication of nearness, on the contrary, is well expressed by an abatement of that force.

Secrecy muffles the voice against discovery : and doubt, whilst it leans towards a positive declaration, cunningly prepares the subterfuge of an undertone, that the impression of its possible error may be least exciting and durable.



Certainty, on the other hand, in the full desire to be heard, distinctly assumes all the impressiveness of strength.

Anger in like manner uses force of voice, because its charges and denials are made with a wide appeal, and in the sincerity of passion : and if I may make distinctions on this point, the same mode is employed in uttering those feelings which are blended with anger, such as hate, ferocity and revenge.

All those sentiments which are unbecoming or disgraceful, smother the voice to its softer degrees, in the desire to conceal even the voluntary utterance of them.

Joy is loud in calling for companionship, through the overflowing charity of its satisfaction.

Bodily pain, fear and terror, are also strong in their expression : with the double intention, of summoning relief, and repelling the offending cause when it is a sentient being. For the sharpness and vehemence of the full strained cry are universally painful or appalling to the animal ear.

In thus amusing the reader with fancies, for so I ought to call them, I have perhaps ventured too far into the vain and presumptuous doctrine of Final Causes. But though we have therein temporarily strayed, let us not forget the duties of philosophy : It is her office to inquire how things exist ; the knowledge of why they so exist, must be the last act of favor which time and toil will bestow. Our steps over the works of man may go hand in hand with the comprehension of their final causes : for the author can tell us the narrow purpose of their parts. But the final causes of nature will be unfolded, only in the last recapitulating chapter of her infinite revelation.

From this cursory view of force, when employed on aggregates of words, I pass to consider in the following sections, the circumstances under which force or stress may be laid on single words or syllables, and on different parts of the radical and vanishing concrete. It will be shown, that an attentive and well disciplined ear has the ability to perceive the different effects of stress, when set on the beginning, the middle, and the end of the concrete movement, or when heard in immediate succession at its extremes : that force of utterance may be so continued throughout the concrete, as to alter the characteristic feebleness of the vanish : and that whilst the relative structure of radical and vanish, formerly described, remains

the same, force may magnify proportionally the whole of the concrete.

These functions are successively denominated, in the six ensuing sections—the Radical, the Median, the Vanishing, and the Compound stress, the Thorough stress and the Loud concrete.



## SECTION XXXIV.

### *Of the Radical Stress.*

THE Radical stress consists in an abrupt and forcible emission of voice at the beginning of the concrete movement.

The Natural radical and vanish, described in the second section, which I here call natural, to distinguish it from the other forms enumerated above, was indeed represented as having an initial fulness; but the function of stress, now under consideration, is characterized by a higher degree of force and a more sudden explosion, in the first opening of the voice: whilst the subsequent vanish is carried on in the diminishing structure of the natural concrete. There are so few speakers, able to give a radical stress to syllabic utterance, with this momentary burst which I here mean to describe, that I must draw an illustration from the effort of coughing. It will be perceived that a single impulse of coughing, is not in all points exactly like the abrupt voice on syllables; for that single impulse is a forcing out of almost all the breath: yet if the tonic element ‘*a-we*’ be employed as the vocality of coughing, its abrupt opening will truly represent the function of radical stress when used in discourse.

The clear and forcible radical stress can take place only after

an interruption of the voice. It would seem as if there is some momentary occlusion in the larynx, by which the breath is barred and accumulated for the purpose of a full and sudden discharge. This occlusion is most under command, and the explosion is most powerful, on syllables beginning with a tonic element, or with an abrupt one preceding a tonic : for in this last case, an obstruction in the organs of articulation is combined with the function of the larynx, above supposed. When a syllable begins with a subtonic, or an atonic which is not abrupt, the full degree of explosion is not practicable, as in 'manful,' 'foster.' If such words are pronounced with vehement stress, there is always an interruption of the voice after the initial element, in order that the tonic may receive the full force of radical explosion. This account may serve to explain more particularly the part which is performed, in intonation, by subtonic elements, at the beginning of syllables. For it was said in treating of syllabication that the subtonic does not always make a part of the concrete movement : but when it has more than a momentary quantity, it is continued upon a line of pitch, and the succeeding tonic opens with a proper radical function. This occurs on most occasions, for though it is possible for a tonic to be opened so gradually, as to allow its being engrafted on a subtonic which has previously risen partly through the concrete, still there is so much of the abrupt fullness in the usual utterance of a tonic element, that it generally assumes to itself the first point in the interval.

If an immutable syllable beginning with a subtonic is prolonged by oratorical license, the subtonic is made to rise with a concrete movement through the designed interval. Thus it is with the words 'let' and 'pluck' when so prolonged : yet in these cases, with a view to join all the constituents of the syllable into one impulse, the tonics must be given in the feeblest effort of the vanish. For should they be pronounced without this caution, it will be perceived that after the initial subtonics have ascended, the tonics, with the subsequent atonics, if struck with force, will, in reality, produce another rapid immutable syllable, succeeding one which has been formed by the concrete ascent of the subtonic : a subtonic, as I have said, being susceptible of the concrete movement, both through a simple inflection, and through the wave.

The power of giving a strong, full and clear radical stress on the tonic element, is not a common accomplishment among speakers ; yet the free and proper management of this function is of eminent importance in elocution. Its two principal purposes are,—to contribute to the excellence of articulation : and to form the distinguishing accent on immutable syllables. These syllables admitting of only a faint display of the peculiar effect of the slow concrete, and being incapable, as will be said hereafter, of bearing the other modes of stress ; the abrupt or explosive enforcement of the radical is their principal means for distinction.

Having pointed out the instrumentality of the radical stress in the work of articulation, this is perhaps the proper place to describe particularly the phenomena which constitute distinct pronunciation.

This subject has three divisions : the First embraces a consideration of the specific sounds which the changeable decrees of human convention give to the alphabetic elements. The Second regards the subject of radical stress : and the Third, an appropriation of the several constituent elements of a syllable, to the concrete movement.

The first of these matters is under the rule of every body, and therefore is very properly to be excluded from the discussions of that philosophy which desires to be effectual in its instruction. How can we hope to establish a system of elemental pronunciation in a language, when great masters in criticism condemn at once every attempt, in so simple and useful a labour as the correction of its orthography !

Supposing then the sound of the elements to be precisely that which temporary authority has determined, the clearness of pronunciation will depend,—

Secondly, on the effective execution of the radical stress. Although it will be said presently, that every element should be heard in the syllabic impulse, yet the tonic, from its very nature is generally the most remarkable in the compound. The characteristic of the syllable, therefore, lies, in a great measure, within this element ; and a full explosive radical stress being laid on it, contributes much to distinct enunciation. It is this which draws the cutting edge of words across the ear, and startles even stupor into attention :—this which lessens



the fatigue of listening, and out-voices the stir and rustle of an assembly :—and it is the sensibility to this, through a general instinct of the animal ear, which gives authority to the groom and makes the horse submissive to his angry accent. Besides the fulness, loudness and abruptness of the radical stress, when employed to give distinct articulation, the tonic sound itself should be a pure vocality. For when it is mixed with an aspiration, the quality of utterance loses that brilliancy, if I may so call it, which serves to increase the impressive effect of the explosive force.

Thirdly. The doctrine of syllabication, set forth in this work, suggests additional means for effecting what is called distinct articulation. In order to insure a clear and striking utterance, the whole syllable should not only be sufficiently loud, but each elementary constituent should be so distinct as to prevent the possibility of confounding syllables which have the same tonic elements, but which differ partially or universally in their subtonics. Now this is to be done by distributing the time and space of the concrete properly among the elements of the given syllable. This will be best explained by particular instances. I have heard an Actor of great celebrity pronounce the word ‘plain’ by prolonging the voice on the ‘l,’ and subsequently terminating the syllable by a momentary transit on ‘ain.’ Though in this case, the ‘l’ was clearly audible, the rapid flight and blending of the ‘a’ and ‘n’ rendered the effect of the whole syllable both faint and confused. The consequence of this kind of pronunciation, for it was a general fault with the player to whom I allude, was, that if he turned his face from the audience whilst speaking, many of his words, though forcible enough in mere sound, were unintelligible to an attentive ear at mean distances in the theatre. A practice like this obstructs the equable flow of the concrete, and overrules the proper apportionment of time to its syllabic constituents. For if each of the elements of the word ‘plain’ have their due portion of the concrete, the pronunciation will at once be distinct.

The principles of articulate utterance under this third head, may be exemplified in the following sentence :

Not that I loved Cæsar less, but that I loved Rome more.

If we give emphatic importance to the word 'more,' by the mere extent of quantity, and not by peculiarity of intonation : and if this quantity be spread upon the unequal wave, with a view to give the feeble cadence to the dignified protraction of the word :—Then in an apportionment of the elements, should 'm' be carried through the rise of the second, and continued downward for some distance through a third ; the 'o' and 'r' being rapidly made at the termination of the wave,—under these conditions, I say, the word will not be well articulated. But if the time of the wave be divided into three parts about equal, and the 'm' 'o' and 'r' be severally assigned to these parts, the utterance will have all required distinctness.

There are many immutable syllables beginning with a subtonic, which a reader, in the current of dignified utterance, is sometimes prompted to prolong beyond the limit of their allowable time. When this practice is assumed by oratorical license, the added quantity is generally expended wholly on the initial subtonic. Thus if the syllables 'not,' 'met,' 'reck,' 'lit,' 'that' and 'vig,' be unusually prolonged, there will be less departure from fixed pronunciation, by giving the additional quantity to the subtonics, than to the tonics. But still there will be a want of that distinctness by which a syllable is immediately recognized : for syllables are known in part, by the habit of their quantity, both as regards the absolute time of the whole, and the comparative time of their elemental parts ; and these points, upon the supposition before us, are widely varied. Now in the above instances, the time of the several elements, which strictly should be about equal, is in extreme disproportion : for whilst the subtonic is extended to what we have called an indefinite quantity, the tonic and the following abrupt element have only their proper momentary duration.

And this which is here assigned as the cause of indistinctness in speech, will be shown, in a future section to be still more frequently a cause of inarticulate pronunciation in the efforts of the Singing voice.

In the two cases of the words 'plain' and 'more' it is recommended to divide the time of the concrete equally among the elements ; and this is necessary for the correct pronunciation of many other syllables, having a similar construction. But we can not give a universal rule on this point, since some inde-

finite syllables, such as 'men' 'run' 'lin' 'gel,' have their prolongation on the subtonic elements, and will not bear any addition to their short tonics.

The radical stress may be exhibited both on immutable and on indefinite syllables; in the former case, from the shortness of the quantity, the function produces, as it were, a mere explosive point of sound.

This stress may be given to all the intervals both rising and falling, and to the beginning of the wave.

From what has been said, it must not be understood that the radical stress is used merely to give the distinction of loudness to immutable syllables: the enforcement is likewise appropriate to the various sentiments embraced by them. But this mode of stress is more particularly a symbol of the highest degrees of passion.



## SECTION XXXV.

### *Of the Median Stress.*

It was said, the Radical stress is principally effective in distinguishing immutable syllables. Long quantities admitting of other modifications which may attract the ear, more rarely require the initial explosive fulness. They receive their stress, with greater embellishment, from an enforcing of utterance on the middle portion of the concrete movement.

As a pause is always the preface to abruptness, the explosive characteristic of the radical stress, can not be employed during the course of a continuous movement. The median stress is therefore a gradual strengthening and subsequent reduction of the voice, similar to what is called a swell in the language of

musical expression. There is this difference between them. The swell of song is sometimes made on a note continued upon the same line of pitch : whereas the median stress is always in either an upward or downward course ; or about the junction of these directions in the wave.

This element of force is applied to all the intervals of the scale : but its very construction indicates the necessity of protracted time for its execution, and therefore that it is most distinguishable on the greater intervals. It may be obvious even on the simple rise or fall of the second, when unusually prolonged. But the quantity of this interval as well as that of the semitone is rarely extended to any considerable degree in its simple state. Those dignified sentiments which require length, direct the employment of the waves of these two intervals. Yet the power of the median stress is not thereby lost, for in this case it is applied to about the middle of the course of the concretes : that is about the junction of the two lines of contrary flexure. What is here said of the wave of these two intervals, may be affirmed of the wave of all intervals of the scale. If the median stress is applied to the double wave, it must be on the course of a downward or upward constituent, according as the wave may be direct or inverted ; for such constituent will be in each case the middle portion of the whole extent of sound.

The median stress is applicable to the intervals of the tremulous scale : and in effect, only enforces by greater loudness, the tittles in the middle of any given interval, or at the junction of a single wave, or on the middle constituent of a double one. When thus employed, it adds impressiveness to the sentiments signified by the tremor, and furnishes variety to the ear.

In as much as force, generally speaking, may be used conjointly with other means of expression, its principal purpose is to enhance the power of those other means. Thus if the median stress is laid on the semitone, it gives force to its plain-tiveness : if on the downward concrete, it adds to the degree of its wonder or positiveness : if on the rising third or fifth or octave, it sharpens the spirit of interrogation. Such is likewise the effect of the radical stress ; the energetic effort of which sometimes amounts even to violence. But the median



stress now under consideration, sets forth the intensity of the voice, in a form of greater dignity than all the other modes. The radical stress having an abrupt opening, and the vanishing, as I shall say presently, having a sudden termination, there is a sharp earnestness in their manner which is not conveyed by the median : the aim and power of which 'in the very torrent of expression,' is to 'beget a temperance which may give it smoothness.'

Here pardon me, reader, when I pass from instruction to eulogy.

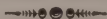
If she could now be heard, I would point in illustration, to Britain's great Mistress of the voice. Since that can not be, let those who have not forgotten the stately dignity of Mrs. Siddons, bear witness to the effect of the graceful vanish of her concrete, and of that swelling energy by which she richly enforced the expression of joy, and surprise, and indignation. But why should I be so sparing in praise, as to select her eminent exemplification of the single subject before us ; when it seems to my recollection that a whole volume of elocution might be taught by her instances.

It is apparently a partial rule of criticism, but when drawn from delicate perceptions, made wise by cultivation, it is the best—to measure the merit of actors, by their ability to give with audible conformity, that same expression of the poet, which the soul of the hearer is whispering to itself. Such is the rule, which, in my early days of ignorance, but not of insensibility, set up this great Woman's voice as the mirror of poetic feeling ; in which one might recognize himself, and love the equal picture as his own. All that is smooth, and flexible, and various in intonation ; all that is impressive in force, and in long-drawn time ; all that is apt upon the countenance, and consonant in gesture, gave their united energy, and gracefulness and grandeur, to this one great model of ideal elocution. Hers was that height of excellence, which, defying mimicry, can be made imaginable only by being equalled.

Such was my enthusiastic opinion, before a scrutiny into speech had developed a boundless scheme of criticism ; which while it admits that nature may hold some unrevealed power of producing occasional instances of rare accomplishment of voice ; yet assures us that nothing but the influence of some

system of principles, arising out of well observed instinct, can ever produce multiplied examples of excellence, or give to any one the perfection of art. There is a power in science which searches, discovers, amplifies, and completes; and which all the strength of spontaneous effort can never reach. I do not wish to be asked, how this ‘most noble mother of the world,’\* with only those unwritten rules of genius, that still allowed her to incur the dangers of the scanty doctrines of her art—would be accounted by the side of another Siddons making her selections of sentiment and taste, from the familiar rudiments and measurable functions of the voice; and able by the authority of an unindulgent discipline to be a rational critic over herself. Though I rely on the surpassing efficacy of scientific principles, still in the contentment of recollection, I would not wish to answer this question.

The vision of the Great Actress is before me! If I am beset by an illusion which another hearing might dispel, I rejoice to think I can never hear her again.



## SECTION XXXVI.

### *Of the Vanishing Stress.*

OUR description of the concrete of speech represented it as formed by an initial fulness, and its gradual decrease. It may already have occurred to the reader, that the construction indicated by the term Vanishing Stress, annuls, in this case, the

\* I refer here, to the salutation of Coriolanus to Volumnia: for it is in this character Mrs. Siddons always comes upon my memory; embodying the pathos, the matron dignity and the indignation, together with the other moral solemnities of the scene of intercession in the Volscian camp.

general law of the concrete. It is true it does. But I thought, the adopted term, even with this verbal contrariety, would be more immediately intelligible, if not more exactly significative of the function, than any other newly invented nomenclature. The vanishing stress does indeed exhibit a reversed progression of force, by a gradual increase from the radical, to the extreme of the vanish. This mode of production must necessarily give something like an abrupt termination, with a fulness of sound, at the extremity of the concrete : for the description of the case affirms its gradual enlargement to the end.

The peculiar vocal effect of the vanishing stress may be illustrated by the natural function of Hiccough. I choose this mode of making the reader familiar with the perception, because the function has received, in this instance, but without attention to its construction, a conventional name, and because it may be readily imitated for the purpose of experiment. The hiccough, then, is produced by the gradual increase of the guttural sound, until it is suddenly obstructed by an occluded catch, somewhat resembling the element 'k,' or 'g.' If this mode of sound be compared with a single act of coughing, the difference between the vanishing and the radical stress will be conspicuous. The hiccough, however, does not resemble the proper vanishing stress of speech in all points ; for this last function does not necessarily end like the hiccough, except the syllable which bears it is terminated by an abrupt element. The hiccough may be made on all intervals of the scale. In ordinary cases, it assumes that of the second : but when it is attended with great distress, as sometimes happens in disease, it is heard through the interval of the semitone.

The effect of the vanishing stress may be perceived in the speech of the natives of Ireland ; many of whom employ it, in the form of the simple rise or fall, or wave, on all the principal words of a sentence. It is this function which produces that quick and peculiar run of syllables, heard in the earnest pronunciation of the lower orders of that people.

The vanishing stress is practicable on each of the rising and falling intervals of the scale. When used on the wave, it must be understood as occurring on the last constituent.

This stress being one of the modes of force, its operation consists in giving to the characteristics of the several intervals, a

more attractive power over the ear, than belongs to their natural concretes. Thus in the second, which has no peculiar expression, it only adds that Irish jerk which deforms without enforcing speech. On the third, and fifth, and octave, it gives intensity to the spirit of interrogation. On the downward course of these intervals, it enhances the degree of surprise and positiveness ; and on the wave, adds power to the expressions which belong to its various constructions.

The effect of the vanishing stress on a semitone, may be heard in the act of Sobbing. This is made on a guttural sound gradually increasing in force and terminated in some cases by an occluded catch. Now when the vanishing stress on the semitone is used in discourse, it is, as it were, a sobbing upon words ; and serves to mark intensively, the distressful character of the simple concrete. The expression of pain or grief may require enforcement, when uttered with that quickness of time which does not admit of the doubled influence of the semitone produced by the wave of this interval. This increased effect may be given to the simple movement in quick time, by the vanishing stress ; which brings out in high relief the dimensions of the interval, and the mournful display of its expression.

Upon this subject it may be remarked in relation to all the intervals, that the nature of discourse occasionally requires so quick a time that only the simple rise or fall can be employed : and yet, it may be highly necessary to designate a given interval strongly and clearly. This can be accomplished by the vanishing stress. For a hasty utterance of complaint and interrogation, which has time for flight only in one direction, will, for the purpose of marking its several symbols on the ear, apply this terminative force to the simple rise or fall of the semitone, third, fifth, and octave.

It was stated that the radical stress is effective, principally in distinguishing short quantities. On these the vanishing stress is not cognizable. It requires a longer time ; and its application thereon, gives an equal degree of force with the median stress : but it has much less dignity and grace than the gradual swell of this last named element.



## SECTION XXXVII.

*Of the Compound Stress.*

BESIDES the perceptible function of stress, when laid exclusively on the beginning or middle, or end of the concrete, it is within the power of the cultivated and attentive ear, to recognize the abrupt opening of the radical, and the full termination of the vanishing stress, when used in succession on the same syllable. The best reference I can make in illustration of this element, is to the vocal grace called a Shake: for I shall endeavor to show hereafter that the characteristic action of this grace consists in a rapid iteration of the concrete when impressed with both the radical and vanishing stresses.

This compound stress, when applied to syllables of long quantity, may be used on the narrow intervals of the scale; but it is more definitely audible on the wider spaces of the fifth and octave. It may likewise be executed on the various forms of the wave; in which case the final stress is laid on the last constituent.

After what has been said of the radical and the vanishing stress, of which this under consideration is but a compound, it is scarcely necessary to remark, that it affords means for adding force to the representation of the sentiments indicated by its constituents when used singly on a syllable. And though the effect of the alternate radical and vanishing stress is beautifully exemplified in the shake of song, and may be made manifest in the speaking voice; yet this compound function can not, on a short quantity, be distinguished from the simple radical abruptness: nor indeed is there, in this case, time for its existence.

Let us suppose that a syllable of long quantity conveys the sentiment of angry or authoritative inquiry; and that the fifth, with protracted intonation, is the interval chosen for this interrogative. The sharpness of effort required here as the sym-

bol of anger or authority, would be rightly represented by the *radical* stress; whilst the full-marked extent of the interval under the increased force of the *vanish*, would give a corresponding energy and impressiveness to the interrogation. The compound stress is, however, by no means an agreeable mode of force. There is a snappishness in its intonation, which should always be avoided by a good reader, except on those rare occasions, that especially call for the peculiarity of its expression.



## SECTION XXXVIII.

### *Of the Thorough Stress.*

By this mode of force in the construction of the concrete, we are to understand, a continuation of the same full body of voice throughout its whole course.

It may be readily distinguished from the median, the vanishing and the compound forms of stress, when these are set on long quantities; and may therefore claim a separate notice in a philosophical analysis of speech. But I can not point out any peculiar expression in it, which is not conveyed by the compound stress, or by the radical when applied on short syllables.

This Thorough force may be given to all the intervals of the scale; and when spread over the wave, it is to be regarded as equalizing the stress throughout all its constituents.

## SECTION XXXIX.

*Of the Loud Concrete.*

By the Loud Concrete, I mean that stress which distinguishes a given syllable from adjacent ones; the parts of the concrete still retaining the comparative structure of the radical and vanishing movement. It is, in short, what was called the natural concrete, magnified by force. It is not distinguishable as an element of stress, on a very short quantity; the radical stress being the proper mode of intension on such syllables.

As far as I perceive, it has no peculiar quality of expression. It is introduced here, only because it will be referred to, in a future section, on accent.

All the modes of stress which have thus been enumerated, may be applied to the various tremulous concretes, and to the tremulous wave. They give energy and variety to a tremor of the higher intervals, which serves for laughter, for interrogation, and for emphasis: and to that of the semitone, which constitutes the function of crying, and of plaintiveness in speech.

## SECTION XL.

*Of the Time of the Concrete.*

THE radical and vanishing movement was represented as having an equable continuation of time, throughout its progress ; and as having thereby a marked distinction from the varied proportions of the radical and vanish, in Recitative and Song.

The purposes of expression sometimes demand a change of this equability of the concrete, into a quicker utterance of its beginning, or middle, or end. This condition of time is closely connected with the application of the different modes of stress : for it is difficult to give stress without running into quickness of time ; and it is as difficult to give quickness of time, without marking the rapid part of the concrete with stress. The connate relation of these functions is most conspicuous in the radical stress ; for its sudden burst is necessarily followed by a momentary quickness of utterance. The median and the vanishing stress, when strongly emphatic, likewise carry with them a rapid run of time : for there is in this forcible execution of these last named functions, an endeavor to reach, as far as can be on an unbroken concrete, the explosive nature of the radical. These fitful gusts of breath, if I may so call the quick transits through the radical, median, and vanishing places, may be employed, like the stress itself which respectively accompanies them, on all the intervals of the scale, and at the same places of the wave on which the stress is applied. There may also be a compound quick time of the concrete, attendant on the compound stress, in the prolonged movements of speech.

On the whole, regarding the time of the concrete separately from stress, I can not recommend it as a matter of any importance in the work of expression. I promised to analyze speech. This quickness was perceived ; and I have therefore transiently noticed it.



## SECTION XLI.

*Of the Aspiration.*

WE have thus far learned that five accidents of sound,—Quality, Time, Pitch, Abruptness, and Force, together with the absence of all impression in the Pause, do by their separate and their mingled influences, produce the varied efforts of speech already described.

The works of nature are cunning patterns of combination : and the function which is now to be considered, will make a new disclosure of the means for diversifying the effect of these elementary agents. The subject of this section does properly belong to the head of quality of voice. But since it has received a place and name among the alphabetic elements, and has peculiar properties, I give it here a separate discussion. I shall therefore endeavour to show that the element symbolized by the letter ‘h,’ or, as it is called, the Apiration, has eminent powers of force and expression.

By calling ‘h’ a mere breathing, some systematic authors have imagined they insure the right to reject this element from the alphabet. Let it be said, in truth, that the aspiration is suited only to near audience ; and wants the fine vocal qualities of the tonics. But whilst ‘harrow’ and ‘arrow’ shall owe the difference of their meanings respectively to the presence and absence of the element, that breathing will fulfil the purpose of articulation, though it may not conform to the full definition of it. Notwithstanding, the defects of the aspiration can not be denied, under the cold measurement of orthoëpy, it is still pre-eminently entitled to notice as a powerful agent in oratorical expression.

The element ‘h’ is slightly susceptible of pitch and abruptness ; but it admits freely of time. Through the exercise of this function it must be redeemed from an alleged insignificance, by furnishing the expressive interjection of Sighing. It admits, to a certain degree, of the variations of force ; exhibiting most

remarkably, under the calls of emphasis, the median stress. In uncompounded words it is almost exclusively found at their beginning ; where its force may be most effectually exerted. This element is frequently a constituent of those words which have universally an energetic meaning, as 'havoc,' 'horror' and 'huzza ;' and it exists in most of the interjections in all languages.

Besides the abovementioned instances of its expression, where common orthography has given it a literal place, it is in certain cases of emphasis engrafted on the several tonics and subtonics. For though the aspiration, as we have seen, does serve the purpose of a distinct constituent of words ; yet it may be severally joined to all those elements which have a vocality, without destroying their individual characters. The pure quality of the tonic is indeed impaired by the union ; for the excellency of this species of element was negatively defined, by declaring its freedom from aspiration : but the loss of purity is supplied by other advantages of the association.

There is some inexplicable mechanism of the organs of speech, by which a strenuous pronunciation of the tonic elements becomes semi-aspirated. If we suppose the word 'horrible' to be deprived of its aspirate, it will be found impossible to give the fragment 'orrible,' in prolonged and energetic exclamation, without restoring, in a great degree; the abstracted element. How far this unavoidable combination operated to introduce the aspirated element, for the expression of the force of instinctive animal feeling, which may have prevailed at what is called, the origin of language, I leave to the everlasting disputes of those who look for truth in fancy, and who tease themselves in the pursuit of undiscoverable things.

Vociferations on syllables which do not orthographically contain the aspiration, nevertheless assume it, and corrupt thereby that pure quality of the tonics which characterizes their abated utterance. Nay, in the excessive force of such exertion of the organs, the voice is sometimes lost, from the atonic aspiration overruling the tonic vocality. The nature of the conjoined functions, thus exhibited in the vehement force of the voice, may be illustrated by the subtonics 'y-e' and 'w-o,' which are respectively a compound of the aspiration with the monothings 'ee-l' and 'oo-ze.' The other three monothongs

'e-rr' 'e-nd' 'i-n,' when united with the aspiration, become obscurely the basis of the several other subtonics. And though the subtonics are thus supposed to be, in a manner, formed by the mingling of vocalities with aspiration, they are yet capable of a further addition, for the purpose of force or oratorical expression.

The diphthongal tonics do not receive the aspiration with the same effect as the monothongs : since there is something in the nature of the diphthongs which prevents as great a change upon them as takes place on the monothongs, by a union with the aspiration.

It was shown formerly that whispering, which is only the articulated mode of aspiration, has its pitch formed upon a succession of different alphabetic elements. Now whatever may be its difficulties of intonation as a simple breathing, it does when joined with the tonics move through all the intervals of the scale, and take on every form of stress.

In order to show how far this element assists in the operations of speech let us keep in mind what was said above, on the spontaneous connexion between a vehement exertion of the voice and its aspiration ; and consider, further, the two following forms of expression.

There is a sort of facetious comment of surprise and incredulity, consisting of an effort of aspiration modified by the tongue and lips, and having all the qualities of whistling except shrillness. The movement of this aspirated interjection is that of an unequal direct wave : the first constituent being a tone or higher interval, according to the spirit of the expression ; and the second a descent to the utmost audible pitch of the breath.

The other effort of aspiration to which I alluded, is made by the larynx alone. It is the function of Sighing : and its pitch is sometimes the simple rising, but more frequently the falling concrete through a second or wider interval, according to the intensity of the feeling which prompts it. This is well known to be the symbol of distress, grief and anxiety ; and of fatigue and exhaustion, both of body and mind. Now since these different cases include the general powers of expression, in the simple and natural aspiration, we can therefrom infer what will

be the effect when this breathed element is joined with the vocality of speech.

It may seem an exception to the consistencies of nature, that a quality of voice, which, under the form of a whisper is the symbol of the desire of concealment, should be found united with the most forcible exertion of the organs. Such, however, is the fact ; for when the aspiration is conjoined with loudness, in some of the vehement modes of stress, it becomes a sign of the highest vocal violence. Its union therefore with any rising or falling interval of the scale, gives increase to the expressive power of that interval ; and if I do not mistake, adds the sentiment of eagerness, or sneer to those intonations, which, in their purely vocal form, severally convey surprise, interrogation, irony, and command.

Should this aspiration be given with an abatement of voice, thereby approximating towards a whisper or a sigh, it produces a difference of expression, according to the extent of its pitch. When the second or higher interval of the scale is employed, it becomes the eminent symbol of earnestness or of apprehension. Thus, if the following lines be pronounced with a pure vocality of the elements, the expression will fall short of the feeling of the speaker :

Hah ! dost thou not see, by the moon's trembling light,  
Directing his steps, where advances a knight,  
His eye big with vengeance and fate ?

Nor would the point be gained, if the reading should be characterized by an aspirated vociferation. But if the utterance is reduced in force, and at the same time aspirated, the earnestness of attention and appealing interrogation, becomes immediately obvious in this created huskiness of voice.

When an abated voice is aspirated on the tremulous movement of the second or higher interval, it may convey the sentiment of fear. When this abatement is aspirated in a simple rise or a wave of the semitone, it is, as it were, a borrowing from the sigh ; and thus gives intensity to the plaintiveness or distress which belongs to the simple vocality of the semitonic movement. But when the tremulous intonation is superadded to the aspirated semitone, the voice exerts its ultimate means,



for marking the deepest sadness within the limits of crying and tears.

Aspiration when combined with the different forms of stress, and with guttural emphasis to be described presently, especially expresses contempt, and the like sentiments : hence the ability to embue nearly every interval of intonation with that expression. Even the simple movements which indicate surprise, inquiry and emphatic declaration, may, by this means, be made contemptuous : but the sentiment is more strongly marked when the aspiration is applied to the forms of the wave ; the bearing of scorn being most conspicuous on its unequal structure.



## SECTION XLII.

### *Of the Emphatic Vocule.*

IN that section where the elements are enumerated, we learned, that when the articulative occlusion, by which the abrupt elements are made, is removed, there is a slight momentary issue of voice which completes the structure of these sounds. This was called the Vocule. Like all other voices it is susceptible of force. Its higher degrees of stress constitute the element named at the head of this section. The emphatic vocule marks great energy of sentiment ; and naturally follows those words which close with one of the abrupt elements.

Three of the vocules are vocal, and three aspirated. The vocules of 'k' 'p' and 't,' which constitute the last class, are often changed from an aspiration to vocality, in an attempt to give stronger emphasis to their termination. No other than the most vehement feeling will justify the use of this element of force, at the end of an emphatic word ; and the most cautious

management is necessary in order to prevent its forcible utterance from having the effect of rant or affectation.

It was stated formerly that when an abrupt element precedes a tonic, the vocule is lost in the sound of the tonic, which in this case issues, as it were, directly from the abrupt element. Thus in the word 'light,' the vocule is distinctly heard at its termination : but if 't' immediately precedes the tonic 'i' as in 'tile' the vocule is lost, and 't' seems to be merely an abrupt commencement of the sound of 'i.' This is the natural and proper mode of coalescence, except the abrupt element terminates a word. For in this case a junction of the vocule with a following tonic may confuse pronunciation by destroying that clear limit which should give a separated individuality to every word of a sentence. This fault, is sometimes even designedly assumed, in order to remedy a want of physical energy in pronunciation. Persons who are called upon to give the utmost sharpness to their accents, and who have not the practical skill to explode the voice suddenly on a tonic, avail themselves of the facility of bursting out from an abrupt element, into the tonic of a succeeding word. Thus if the phrase 'bad angels,' should require force, either for emphasis or for a distant auditory, it would, with a view to this explosion, be pronounced 'bad-dangels.' But as the arrangement of elements is a casual thing, it must happen that the same word will occur in discourse, both with and without a preceding abrupt element : and besides, the common exertion of force does not require this coalescence. These circumstances will prevent the effect of the junction from becoming familiar to the ear, and thus passing for a proper and constant character of the word. A forcible pronunciation according to this method, will, therefore, in some cases, create mistakes in the sound of words ; and lead in most instances, to that momentary hesitation which is incompatible with an exact perception of oral discourse. Let the phrase 'music sweet art' be pronounced in this manner, and the combination will present an image both ludicrous and contradictory.

If what has been said, on the subject of distinct articulation, as effected by the full and clearly formed radical stress, be thoroughly applied, the designed purpose of this junction of tonic with abrupt elements may be accomplished without in-

terfering with the perception of a clear outline in the boundary of words. For this demarcation is necessary towards that distinct and deliberate utterance which characterizes the dignified departments of an exalted elocution.

In the rapid energy of colloquial speech, and in the passionate haste of elevated delivery, this coalescence of the elements is more liable to occur : nor in these instances can it always be avoided.



### SECTION XLIII.

#### *Of the Guttural Emphasis.*

IN speaking of the mechanism of the voice, it was shown that the retraction of the root of the tongue, together with a closure of the pharynx, produces what seems to be a contact of the sides of the vocal canal above the glottis, and thus gives rise to a harsh vibration, from the gush of air through the straitened passage. The peculiar sound is made on the tonic and subtonic elements, the varieties of which may be distinguished, notwithstanding their combination with this grating noise. I have called this function of the voice, the Guttural emphasis on account of its apparent causal mechanism, and from its being a forcible expression of the sentiment which dictates it.

This guttural element is practicable on all the intervals of the scale : and it adds to their respective characteristics, its own peculiar expression. This expression consists in the strongest degree of contempt, disgust, aversion or execration ; and these sentiments are most strongly marked on the intonations of the wave.

When this guttural grating is given with the exploded radical stress, it makes the speaker himself feel, in its disruption

from his organs, that the effect must spread widely around him : and whilst it assaults the air with its percussion, that it must break through the ear, into the understanding and heart of an audience.

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Having thus described the particular species into which the generic affections of Pitch and Force are subdivided ; and having marked out some of the occasions for their application in speech, we are now prepared to consider the special points of these functions, comprehended under the terms Accent and Emphasis. This detail will form the subjects of the two following sections.

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## SECTION XLIV.

### *Of Accent.*

ACCENT is defined in philology, to be—the distinguishing of one syllable of a word from others, by the application of a greater force of voice upon it. This is a true, but limited account of accent : for it will be found on analysis that the accentual characteristic consists in a syllable being brought under the special notice of the ear. This may be done by force ; but it will be shown presently that it may be likewise effected through other audible means.

No word when uttered singly, except as an ellipse, conveys any intelligible meaning. Accent, which is one of the qualities of individual words, can not therefore embrace what is properly called expression. When the conspicuousness of a syllable, whether made by force or other means, carries with it a remarkable meaning or a feeling, it constitutes the function called Emphasis.

If the difference, thus stated, between accent and emphasis



is accurately pointed out, Accent may be defined in general terms, to be—the *inexpressive* distinction made between the syllables of a word. This simply audible prominence may be effected by the radical stress,—the loud concrete, and—a longer quantity on the noted syllable.

In the first place. The radical stress constitutes the accent on immutable syllables. The word ‘victory’ has three short syllables, and the accent on the first consists of this mode of stress : the brevity of the syllable not admitting the perception of a continuation of loudness. If therefore any distinction is to be made by force, the syllable must burst with the requisite fulness into a momentary existence. The accent may be transferred to either of the other syllables, by giving the highest degree of abruptness respectively to each.

Secondly. Syllables which have length sufficient to render the radical and vanishing movement cognizable, admit of accentual distinction by the loud concrete. In the word ‘Paddington,’ the three syllables are of moderate length, and about equal. As the first has quantity sufficient to prevent the necessity of adopting the explosive radical stress, its high-relief in pronunciation can be brought out by the loud concrete alone. In this example the accent may be easily transferred to either of the other syllables, by a slight increase of force : and it is to be remarked, of syllables to which the loud concrete is applicable, that they readily receive at the same time an addition of the radical stress. But the former mode of distinction being adequate to the inexpressive denoting of accent, there is no call for the further help of the radical abruptness, except on occasions which require the expressive distinction of emphasis.

Thirdly. When the time or quantity of one syllable exceeds the rest, that syllable readily receives the accent, and even when unassisted by loudness or abruptness sometimes necessarily assumes it. If the word ‘victory’ be pronounced with the usual degree of radical stress, on the first syllable, and the second be subsequently prolonged as if written ‘victoe-ry,’ the distinguishing impression of the accent, which in this case may be called the Temporal accent, will be postponed to that second syllable ; even though it be uttered with comparative feebleness, and with all possible omission of abruptness. Words which consist of syllables of equal time, such

as 'needful,' 'empire,' 'farewell' and 'amen,' easily undergo a change of accent, merely by a slight addition to the length of either syllable. When the word 'heaven' is pronounced correctly as if written 'hev-vn,' the longer quantity of the first syllable assumes the accent; but when divided into two equal syllables as in 'hev-ven,' the place of the accent is doubtful; or the word may be said to have two equal accents.

These are the three modes of accentual distinction: accent being the prominent and fixed feature which serves to identify a word, without enlivening its utterance by any peculiar sense or expression. Now as these means are sufficient to give an importance to syllables, without conveying at the same time an especial meaning, which is the design of emphasis, we may see the line of separation between these functions. It is true that emphasis, which employs all the elements of expression, can not exist without accent; for the emphatic is always the accented syllable: and the expressive power of pitch, time and stress must give to the emphatic syllable that attractive influence over the ear which constitutes the essential agency of accent.

I have pointed out only the radical stress and the loud concrete as the causes of accent derived from force; since the median, the vanishing, the compound, and the thorough, are more commonly used as the means of expressive stress: and in the plain example of a single word, surely no one does employ these last named elements. It is proper to remark further, that although the modes of accent have been represented as independent of pitch, still they do not exclude the use of certain of its inexpressive forms. Thus the radical stress and the loud concrete do move rapidly through a tone; and the temporal accent when very remarkable, generally takes the form of the direct or inverted wave of the same interval. For this, as was shown in its proper place, gives dignity to utterance by means of its deliberate movement: yet has no peculiar expression incompatible with the simple diatonic melody.

Since it appears that the use of the three modes of accent, is in a considerable degree governed by the time of syllables, it is desirable to know the circumstances which render these modes severally applicable; make them easily changeable; and fix the preponderance of their influence.

The temporal qualities of syllables were arranged under

three classes.—The Immutable, Mutable, and Indefinite. The radical stress is the means of distinguishing immutable syllables. The loud concrete may be given to the mutable: since they have sufficient length for the display of force without the necessity of an abrupt explosion. Indefinite syllables, by their capability of prolongation, admit of the attractive distinction of the temporal accent. But in speaking of the time of syllables, it was said that those of indefinite quantity are sometimes pronounced equally short with the immutable. Thus, ‘lo,’ in ‘loquacity,’ and ‘lo’ used as an emphatic interjection, exemplify the extremes of duration. Hence it follows that the radical stress may sometimes be used on an indefinite syllable, in its shortest time: as it is in the accent of the word ‘illative.’

In some words, consisting of a long and a short syllable, the accent of stress and of quantity readily give way to each other, at the option of utterance. Thus in the noun ‘perfume,’ the length of the last syllable yields to the stress on the first. But in the verb ‘perfume,’ the stress as easily gives way to the temporal accent on ‘fume.’

Of all the modes by which one accented syllable of a word is embossed upon the ear, if I may so speak, in higher relief than others, the most common is that of the temporal impression. I mean, that in the English language the accented syllable in words is generally the longest: and the excess of length alone, without any apparent radical abruptness, or increase of force on the whole concrete, above the neighbouring syllables, is sufficient to answer all the purposes of accentual distinction. The majority of writers, without sufficient examination, have resolved all accents into excess of force.

In as much as the radical accent belongs to short syllables; and as the loud concrete may be arbitrarily applied on all but short syllables, it may be inquired—which of the modes has the most influence in pronunciation, or has a controlling or excluding power. In most words, this predominant influence is readily mutable, by an increased application of the means which distinguishes each mode: as in the words ‘commemoration,’ ‘perlieu,’ ‘Cordova,’ ‘Ontario,’ the accent, of whatever kind, being in these instances as easily practicable on one syllable as on another. But in words having such a temporal arrangement as occurs in ‘beguile,’ ‘indeed,’ ‘delay,’ and ‘re-

venge,' the temporal accent can not be deprived of its supremacy, by a radical stress on the first syllable, except through an irksome effort of the organs in exploding the first, and abbreviating the last. For it is sometimes necessary to reduce the quantity of one syllable, in order that the radical stress may take the lead on another. The accent of the word 'Emanuel,' lies in the quantity of the second syllable. Scarcely any force of abruptness can transfer the accent to 'e,' whilst 'man' retains its length. When this is shortened, the first syllable 'e,' may, through a strong radical stress, be made the leading accent; but the word will scarcely be recognized in the change.

In regarding the circumstances of accent, it ought to be borne in mind that the difference in kind of the elementary sounds, may in some cases, be mistaken for a difference in force; since to many an ear, 'ee-l' and 'a-le' might seem to be surpassed by 'ou-r' and 'a-we.'

It is also to be remarked, that there are different degrees of susceptibility among the elements, in receiving the accent. The tonics most easily and conspicuously take on each of its three modes. The abrupt elements assist the explosive effort of the tonics; but are utterly incapable of the loud concrete, and the temporal accent. The subtonics have little or no power, under the radical stress; but accomplish all the purposes of quantity: whilst the atonics are feeble instruments of the accidental distinction, whether its aim be at time or stress.

The impressive agency of accent on the ear, is fixed by the orthoëpy of the English language, on one or two of the syllables of all words which have more than one. It is a great source of variety in speech; is the principal instrument of our versification; and when skilfully disposed, by the adjustment of a delicate ear, produces, with the assistance of quantity, the rythmus of harmonious prose.

Some grammarians and rhetoricians, with whom the intelligent Mr. Sheridan is to be ranked, have set forth a rule, that when the accent falls on a consonant, the syllable is short: and long when on a vowel. Whilst I was at school, I could not understand this great prosodial principle: now, I perceive it has no meaning. For if accent be variously produced by radical stress, the loud concrete, and by quantity, a distinction of literal place can not give the variety which the rule supposes.



The abrupt stress will always be made on a tonic (or vowel), notwithstanding the syllable may be opened on a preceding subtonic or abrupt element. The loud concrete must be made on all the elements of the syllable without distinction : and the accentual impression by quantity must consist of the united time of tonics and subtonics, when the syllable is constructed with these different elements. But all this is only a denial of the truth of the rule, on the grounds of the phenomena of accent which have been pointed out in this section. Let us see how the principle corresponds with the fact of pronunciation. In the word 'action,' the abrupt stress is on a vowel, (tonic) and yet the syllable is short : and in the word 'revenge,' the greatest impression is from the quantity of the subtonics (consonants,) and yet the syllable is long. Language is full of like examples ; and from the illustration they furnish of the nature of accent, we may learn that the time of syllables bears no certain relation to stress, nor other modes of the accentual agency. The prevalent error on this subject must be ascribed to the general cause of all errors,—The want of observation at first, and the assumption of notions to prevent observation ever after.

Mr. Walker has given a theory of accent, in which he makes it dependent on the rising and falling inflection, as indefinitely described by him. If the preceding history of intonation is true, and if it has been clearly comprehended, the reader must at once conclude that accent can have no fixed relationship to a rise of the voice or to its fall : for it may be made with every essential characteristic under either of these opposite movements ; their junction into the wave ; and under all the changeable phrases of melody.

Much has been said by authors on the subject of accent. But I began this analysis of the human voice, with a resolution to speak after nature ; not after men.

## SECTION XLV.

*Of Emphasis.*

THAT function which Rhetoricians call Emphasis, is defined to be—a stress of voice on one or more words of a sentence, distinguishing them by intensity or peculiarity of meaning. Some writers, without seeming to care much about the point, indefinitely attribute to emphasis, a characteristic intonation : and Mr. Walker imagined he specified his idea of ‘tone’ throughout all its conditions, when he made an erroneous application of the upward and downward inflection.

But authority aside ; let us try to do something to the purpose, by observing the thing.

It was stated that accent is the fixed but inexpressive distinction of syllables by quantity and stress : alike both in place and nature, whether the words are pronounced singly from the columns of a vocabulary, or connectedly in the series of discourse.

Emphasis may be defined to be the—*expressive* but occasional distinction of a syllable, and consequently of the whole word, by one or more of the specific modes of Time, Quality, Force and Pitch.

This notable function belongs essentially to the current of discourse ; but it may be employed on solitary interjections, and on single words which stand as elliptical sentences. It will appear hereafter, that emphasis is no more than a generic term, including the specification of the uses of every accident of the voice for the purpose of enforcing sentiment and thought.

The conditions of sound which constitute accent, being included among the enumerated causes of emphatic distinction, it may be inferred, that in these particulars, accent and emphasis can not differ from each other. The quantity, radical stress, and loud concrete, employed as the means of emphasis, have indeed the same elemental nature, as in accentual agency, but their purposes in the former case invest them with that expression which constitutes the characteristic of emphasis.

For a detailed account of the particular occasions of emphasis the reader is referred to libraries. They contain many rhetorical works, setting forth this part of the subject, with comprehensiveness, perspicuity and taste. It is the aim of this essay rather to point out and to measure the vocal material of emphasis.

Emphasis as was stated above, produces its effect upon the ear, by means of the quality and time of sound, the modes of stress, and the varied intervals of intonation. The particular enumeration of these means will be given under the following heads.

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### *Of the Radical Emphasis.*

WHEN an immutable syllable bears the accent of a word which is remarkable by sense, sentiment or antithesis, the audible distinction can be made only in three ways: by quality of voice; a wide change in the phrase of melody; and the abrupt enforcement of the radical stress. The two former modes of emphasis on short syllables, will be noticed in their proper places. The last is here illustrated.

And with perpetual inroads to alarm,  
Though inaccessible, his fatal throne;  
Which, if not *victory*, is yet revenge.

If the strongly contrasted feature of the word '*victory*,' is not represented by guttural emphasis; or by aspiration, or some other available quality; or if it does not receive the peculiar coloring, effected by a change of radical pitch upward or downward through the skip of a third, fifth, or octave—If, I say, these are not used, the syllable '*vic*' must be raised into importance by means of the sharp radical stress: at least no other can be operative whilst the syllable is limited to its natural quantity.

It is true, even an immutable time, as formerly said, may be carried rapidly through any interval of the scale; still if this rapid movement is not joined with the radical change, it does not deserve to be taken into account in this case.

Although the radical distinction is here spoken of as appli-

cable to immutable syllables: it is plain from its nature, that it may be laid on those of indefinite time. But since these admit of the more agreeable modes derived from intonation, they less frequently require the strong explosion of the radical.

This emphasis is the symbol of sentiments of anger, violence, and energy of all kinds; and is the common mode of enforcement, whatever is the time of the syllable, when the spirit of discourse directs a rapid utterance.

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### *Of the Median Emphasis.*

THE prominent display of the sense of a word, by a gradual increase and subsequent diminution of voice, can be effected only on syllables of indefinite time. It gives an importance equal to that of the radical stress, but it exhibits the element of force in an aspect of greater smoothness, dignity and grace. In the following sentence, the word 'sole' contains a sentiment of warm and serious admiration, which is finely set forth by means of this emphasis.

Wonder not sov'reign Mistress, if perhaps  
Thou canst, who art *sole* wonder!

Though the median mode of force might be executed on the simple rise and fall of intervals, when considerably protracted, yet it is most frequently made on the wave. In the present case the intonation of the word 'sole' is through the wave of the second; the swell being at the junction of its two constituents.

The reader must bear in mind, that in assigning the mode of stress to this and the preceding examples, I have been governed by the principles of speech laid down in this volume; and shall continue to apply them in illustrating all the other forms of emphasis included under this section: for if these examples be read in any of those various ways which result from spontaneous attempts in elocution, I shall in all probability be misunderstood. On this ground I would allot to the lines above quoted, that plain but deeply respectful character which belongs to the utterance of protracted quan-



tities in the diatonic melody ; giving to the emphatic syllable the importance of greater time ; and smoothly enhancing it by the swell of the median stress.

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*Of the Vanishing Emphasis.*

THE words which bear this mode of stress are characterized by a degree of violence, nearly equal to that which was said to belong to the radical emphasis. Why then are they distinguished from each other by name ?—The radical is perceptible on immutable syllables ;—the vanishing can not be recognized upon them. Some extent of quantity is required for its display : and though the sentiment of quick energy, that prompts it, generally appropriates it to a simple concrete, which has just sufficient time to admit of its application, still it is sometimes effectively made on the utmost extension of the single movement or the wave.

In the following examples this inversion of the natural concrete, may be employed as the symbol of quick impatience in the one case, and of threatening revenge in the other.

Oh ye *Gods* ! ye *Gods* ! must I endure all this ?

---

Oh ! that I had him,  
With six Aufidiuses, or more, his *tribe*,  
To use my lawful sword.

If the words here marked in italics, be pronounced with the vanishing stress, they will exhibit that Irish provincialism, which was said to characterize in a degree, this species of intonation.

This form of stress is often used for the hasty energy of a question. For since the wider spaces of the scale are the symbols of interrogation, the reach of the interval is more clearly impressed by this full and emphatic boundary, than by the feebler termination of the natural vanish.

Perhaps a cause of the peculiar expression of the vanishing emphasis, may be found in this,—From the ordinary habit of the voice in the concrete, it is difficult to produce a final ful-

ness and force, without giving a rapidity of time to the execution : and this adapts it to the active sentiment, it is employed to represent.

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*Of the Compound Emphasis.*

A DEGREE of emphatic distinction by stress, stronger than that of any of the preceding modes may be applied to syllables of indefinite time ; for these, under the direction of vehement feeling, may receive their force from both the radical and vanishing stress : as in the following urgent call.

*Arm* warriors *arm* for fight, the foe at hand,  
Whom fled we thought, will save us long pursuit  
This day.

The imperative words here marked in italics, require the use of this double form of stress. It is however more particularly appropriate to the forcible expression of interrogative sentiments. The reason of this is given in the thirty-seventh section ; and I here cite an example, from the scene of Hamlet's violence towards Laertes, at the grave of Ophelia.

Dost thou come here to *whine*?  
To outface me by leaping in her grave?

The intense spirit of these questions calls for the Thorough interrogative intonation ; and the emphatic importance of the word 'whine,' requires the rising octave with the compound stress upon it. For thus the radical abruptness on 'i' sets forth the threatening rage of the prince, whilst the vanishing stress on 'n' conspicuously denotes the inquiry, by marking the extent of the interrogative interval.

This is not the place to speak of the aspiration which may be joined with the compound stress, for the expression of that contempt or scorn which the question may contain.

On the whole, I confess that the discrimination of this mode of emphasis, in the current of pronunciation, is not so easy, as that of the preceding. Still it does exist as an element of

force. Its effect is peculiar to itself: and by deliberate analysis is clearly resolvable into the above named constituents.

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### *Of the Thorough Emphasis.*

IN detailing the assignable forms of force, I gave those of the thorough stress, and the loud concrete, as distinguishable from the rest and from each other.

But I do not feel disposed to insist upon the importance of these distinctions, for the practical purposes of elocution. They exist however, and exert their influence upon the ear, and understanding. Yet they are not either in nature or degree, so distinguishable from the radical and the compound stress, and from each other, as to require the special exemplification which has been made of those other elements. Any peculiarity which may be found in the two functions under consideration, is relative to the time of syllables: for when a syllable is not so short as to require the emphasis of the radical stress, nor of sufficient length to admit of the protracted modes of force, the required distinction may be effected by the loud concrete: as in the marked syllable below.

This knows my Punisher: therefore as far  
From granting he, as I from *begging* peace.

---

### *Of the Aspirated Emphasis.*

IN the section on aspiration, one of the expressive effects of that element, was shown in the earnestness that it spread over a whole sentence to which it was applied. But the same expression is sometimes carried in a single word; thus constituting the aspirated emphasis. Many words claim this emphasis from the essential energy of their meaning; and these, in some cases, have the literal symbol of aspiration, as 'havoc,' 'horror,' 'huzza.' A similar remark may be made with regard to some of the interjections. I need not quote instances of aspirated utterance in the exclamations of passion, nor in the pure breathing of a sigh: the pages of the drama are full of examples.

In the following dialogue from *Julius Cæsar*, the effect of the aspiration, in marking an earnest sentiment, is sufficiently obvious, on the word ‘fear,’ which is set in italics.

*Brutus.* What means this shouting? I do fear, the people  
Choose Cæsar for their king.

*Cassius.* Ay, do you *fear* it?  
Then must I think you would not have it so.

And again, in the tent scene, the earnest repugnance of Cassius is manifested in the aspiration of the word ‘chastisement.’

*Brutus.* The name of Cassius honors this corruption,  
And chastisement does therefore hide his head.

*Cassius.* *Chastisement!*

If the aspiration is combined with the vanishing stress on a simple concrete, or on any of the forms of the wave, it communicates an expression of sneer, contempt, or scorn.

The aspiration may be applied to syllables of every variety of time; to all the modes of force; and to all intervals of intonation.

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### *Of the Emphatic Vocale.*

WHEN an emphatic word terminates with an abrupt element, and is followed by a pause, that slight issue of sound which we have called the Vocale, generally receives a continuation of force from the emphatic word: and this, by its extraordinary increase, becomes the mark of high vocal excitement.

There are some occasions on which this element may be used, with a view to press into a syllable all the power of emphasis. But it comes so close to affectation, that I long hesitated about its classification, as a fault, or an assistant enforcement of speech.

I will not say absolutely, it should be heard in the following lines, from the close of the third scene in the third act of *Othello*. But if the word ‘hate,’ be pronounced with the



force required by the sentiments of the Moor, the emphatic vocule will be very apt to follow the organic opening of the atonic abrupt element.

Yield up, O love, thy crown, and hearted throne  
To tyrannous *hate*! swell, bosom, with thy fraught.

---

### *Of the Guttural Emphasis.*

THE sentiments of disgust, aversion, execration, and horror, give their expression to an emphatic word, by joining the peculiar quality of sound, here named, to other modes of distinction. It is most frequent on the daily occasions for revolting interjectives; but is sometimes found engrafted on the syllabic utterance of discourse. I am disposed to think it might be used on the word 'detestable,' in the following lines, from that dreadful malediction upon Athens, at the opening of the fourth act of Shakspeare's *Timon*.

Nothing I'll bear from thee  
But nakedness, thou *detestable* town!

When this element is compounded with the highest powers of stress and aspiration, it produces the most impulsive blast of speech.

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### *Of the Temporal Emphasis.*

WHEN the quantity of an emphatic syllable is long, and admits of indefinite extension; when the word conveys merely a discriminative meaning, without any peculiar sentiment or passion; or when the distinction has the sole purpose of an emphatic tie, the impression may be made by the influence of time alone, as in the following address:

Hail holy Light, offspring of Heaven first-born,  
Or of the Eternal, coeternal beam,  
May I express thee unblamed?

Or more conspicuously in Abdiel's warning to Satan.

For soon expect to feel  
His *thunder* on thy head, *devouring* fire.  
Then, who created thee lamenting *learn*,  
When who can *uncreate* thee thou shalt *know*.

In this example, the long quantities of the accented syllable of 'thunder,' and 'devouring,' are given as instances of the emphatic tie; by which the apposition of two subjects, notwithstanding the intervening clause, is shown in its true syntax by the voice. Perhaps these words, as well as the others which are marked for quantity alone, might, in the opinion of a critic, receive the additional distinction of a forceful or intonated mode of emphasis. It may be learned from the speech at large, that Abdiel is no longer the 'fervent angel' contending with the apostate. He is now the herald of the decrees of the Almighty. The warm spirit, the hopes and the fears of argument, have given place to grave admonitions, and to the solemn declarations of an ordained judgment; and the mode of unimpassioned but conspicuous distinction by temporal emphasis, appears well accommodated to the utterance of the 'unmoved, unshaken, unseduced, unterrified,' and prophetic Seraph.

The reader must have seen how closely connected the various accidents of speech are; and that however wishfully the attempt is made, to bring them down to the state of single constituents, it is impossible to represent each separately in the necessary illustrations. I am pretending here to speak of the simple extension of quantity as the means of emphasis, when in reality that quantity is effectual, as an attractive agent, even in its plainest form, through the influence of one of the formerly described elements of intonation. It must therefore be taken into the account of the temporal emphasis, that,—though the protraction of syllables may be made in the simple rise or fall of an interval, still the common form of long quantity is that of a direct or inverted wave. When the time is extended on interrogative syllables; or on those which carry positiveness or command; or which form a monad cadence,—the intonation is drawn, respectively to these cases, through the simple course of the upward or downward third or fifth or eighth. But in the plain emphasis of time, such as

that employed in the above examples, and such generally as may be used in the diatonic melody, which admits of no peculiar expression except that of serious dignity,—the extension of the indefinite syllable is always made by the direct or inverted wave of the second.



### *Of the Emphasis of Pitch.*

It was stated generally in speaking of the pitch of the voice, that the several intervals of the scale are used as the means of emphasis. We should now proceed to the illustration of this subject: but as the rising third, fifth, and octave, were said to be the symbols of interrogation, and as they have this signification even when applied to but one word of a sentence, it certainly becomes a matter of inquiry, how the interrogative characteristic in discourse is to be distinguished from the emphatic. There must be even to the common ear, something like an unwritten rule to which reference is unconsciously made; for notwithstanding, the frequent employment of these symbols in their different meanings, these meanings are rarely confounded. But our discriminations of this matter have in time past been but four footed instincts; let us try to ennoble them a little, by giving them the support and the exalted step of principles.

The various modes of constructing interrogative sentences were described in the sixteenth section.

As the emphatic employment of the intervals of pitch is on a single word of a sentence, or at most on two or three, there is no liability to mistake cases of emphasis, for those of declarative and earnest interrogation, which always bear the thorough intonation. It was shown formerly that the partial expression is never applied except to questions made by the pronoun or adverb, or by the inverted nominative: therefore, questions of this sort, even when intonated by a solitary third, or fifth, or octave, are not liable to be confounded with cases of emphasis formed upon these same intervals, in sentences which have not the above described grammatical construction.

Many phrases which have the form of a question, seem nevertheless to hang doubtfully between an interrogative and an





of its sound, conspicuously distinguish that syllable above others formed on the interval of a tone; and will thus be brought within the meaning of the term emphasis, even though it should not receive any excess of force.

The reader may remember what was said on the subject of the intervals of the scale being appreciable, even in the momentary flight of an immutable syllable. But it has been shown likewise, that such short syllables generally take on the expression of the octave, by a skip of radical pitch, from the level of current speech to the height of that interval above it. The emphasis of the octave appears therefore under the form of the slow concrete, and that of the change of radical pitch; and it may be well to have it understood here, that the same varieties exist in the emphasis of the other higher intervals of the scale.

I can not say that the octave is employed emphatically, except for the special enforcing of one word above others, in an interrogative sentence: and this indeed but rarely; for there is a kind of musical cant in its long-drawn ascent that excludes it from those elevated purposes of speech which it is the design of science to investigate, and of taste to approve.

The octave, it was remarked formerly, carries the spirit of a quick, a taunting or a mirthful interrogative; and is perhaps never used in a calm, serious and dignified question. It would be admissible in the following sneering exultation of Shylock over Antonio.

Monies is your suit.

What should I say to you? should I not say?

Hath a *dog* money? Is it possible

A *cur* can lend three thousand ducats?

Every word of the two last questions will bear an interrogative intonation: but the terms *dog* and *cur* being emphatic allusions to the previous railing of Shylock by Antonio, they carry a revengeful triumph, and an immediate antithesis to their former purpose, by being run up to the piercing treble of the octave. It is possible, some readers might be disposed to set a more dignified mode of intonation on these questions. I only say they will bear what is here given, without making

preference the subject of discussion. The readings proposed throughout this essay are for illustration, and their design is fulfilled, whether or not they exactly accord with common opinion. There is a best in the works of every art: but the latitude of their variation, within the pale of principles, has an ample and liberal scope, which sometimes will admit even cases of unsuccessful search after excellence. Over such failures the intelligent critic will be neither quarrelsome nor severe.

The emphasis of the octave when formed by a change of radical pitch, is exemplified in the following lines.

'Zounds, show me what thou'lt do:

Woot *weep*? woot *fight*? woot *fast*? woot *tear* thyself?

The exasperated energy of Hamlet, in his encounter with Laertes, calls for the highest pitch of interrogation on the words here marked; but the correct pronounciation of these words does not admit of the slow concrete. To fulfil the purposes of expression they are to be immediately transferred by radical change to an octave above the word 'woot,' which is set in its several places, at the common level of the voice. The emphatic syllable, when thus raised, is still further endowed with the character of the interrogative interval, by a rapid flight through the concrete octave, agreeably to the account given of this process in a former section. In short, the first seven words of the second line do really skip, alternately ascending and descending, between the extremes of an octave.

Whilst these lines are before us, it may be well to draw attention to the contrast between the two modes of pitch in the octave: for the word 'tear,' having an indefinite quantity, admits freely of the protracted concrete; and the voice after being restrained on the preceding immutable syllables is here restored to its prolonged and gliding intonation.



### *Of the Emphasis of the Fifth.*

THE relation which the interval of the concrete fifth bears to the octave, was shown formerly as regards its interrogative

character. As a symbol of emphatic sense or passion, the fifth is less attractive to the ear than the octave : for it has not the piercing influence which belongs to the latter interval. There is however, more dignity in the importance which it gives to a syllable. In the following lines from Satan's address to the sun, the emphasis on 'thee,' may be made by the concrete fifth.

Evil be thou my good: by *thee*, at least  
Divided empire with Heaven's king I hold.

I have said here, (and I beg the same latitude for other cases) that a certain symbol of emphasis *may* be employed: since, on many occasions, the means of emphasis may be varied. Thus, in the present example, the syllable 'thee,' might be made in the wave of the fifth or the third, or even the second; but under this last substitution, the want of that eminence which is given by the rise of the fifth, must be supplied by a long quantity, and by the use of the radical or median or vanishing stress on the wave so employed.

In the following lines, the emphasis of the fifth on the word 'beauty' is perhaps not absolutely unchangeable to any other mode: but it certainly produces a brightness of picture, which seems best suited to the sentiment, and which can not perhaps be so well effected in any other way.

Tears like the rain-drops may fall without measure,  
But rapture and *beauty* they can not recall.

The emphasis of the fifth, by a skip of radical pitch, is well exemplified in that line which was quoted to show the radical stress.

Which, if not *victory*, is yet revenge.

Here the force required on the word 'victory' claims all the assistance which intonation can add to its abrupt stress: and this is given by setting the short syllable 'vic' at a discrete fifth above the place of 'not.'

*Of the Emphasis of the Third.*

THE striking intonation of the octave and the fifth is suited to the earnest spirit of colloquial utterance, and to the forcible sentiments of the drama. The rise of the voice through the third, though still denoting both interrogation and emphasis, produces a less intense, but a more dignified impression on the ear, in the purposes of its application.

The rise of the third may be set on the word 'he,' in the following lines.

Who first seduced them to that foul revolt?  
The infernal Serpent; *he* it was, whose guile,  
Stirred up with envy and revenge—

There are some phrases simply interrogative ; which convey none of those other sentiments formerly ascribed to the octave and the fifth. The emphatic distinction in these cases, is made with the moderately attractive influence of the third.

Dost thou think *Alexander* looked o' *this fashion*,  
i' the *earth*?

If, in this example 'Alexander,' 'this fashion,' and 'earth,' be taken as emphatic, the distinction will be appropriately made by the third. Should the intonation on these words be in the higher interval of the fifth or octave, it would imply an eagerness of inquiry, and a light familiarity of address, not suggested by the sense of the question, nor consistent with the temper of Hamlet's moralizing reflections.

It is scarcely worth while to illustrate the radical skip of the third in relation to emphasis. The word 'victory,' in a preceding example, may be executed in this discrete interval, if the reader should think the fifth, which is there used, too high: for it will exemplify either case, according to the degree of energy ascribed to it.

It was shown in the fifteenth section, that the third is employed on the emphatic words of conditional, concessive, and hypothetical phrases.



I have said that the minor third has a plaintiveness, not unlike the effect of the semitone. It is not indeed more impressive on the ear, in all the purposes of speech, than this last named interval, but it has more of the whine or cry in it. It may therefore be used for emphasis in the course of a chromatic melody, whenever a word or phrase contains a sentiment that carries the plaintive feeling to the point of tears.



*Of the Emphasis of the Semitone.*

I OMIT here, allotting a head to the subject of the tone or second. The reader must by this time be so well acquainted with the construction of the diatonic melody, as to admit, that if the second is the common form of the concrete, in all discourse which carries no important or peculiar expression, the simple rise through that interval can not, as far as regards pitch, be emphatic. Indeed the other intervals owe their attractive power to their contrast with this general current of the simple second. It is true, a syllable is made emphatic by quantity; and that quantity is commonly a prolongation through the doubling of the second into the form of a wave. But the impressiveness is here an agency of time, not of intonation.

As the semitone has a peculiar expression, it could fulfil the condition of emphasis, when laid upon a single word in the course of a diatonic melody. It rarely happens however that a word is found thus insulated: for if a plaintive sentiment issues from one word, it generally spreads its effect over the whole of the phrase or sentence; thus constituting the chromatic melody, and thereby destroying the solitary importance of the semitone.

There are however other modes of emphasis in a chromatic melody. It may be made by stress in its various forms; and by time, for the semitone is set on syllables of all quantities. It may likewise be effected by intonation, in the following manner.

When a syllable calls for the emphasis of pitch in a chromatic melody, that emphasis can not be a concrete rise through the second, third, fifth or eighth: for these movements would

destroy the plaintiveness, which by the conditions of the case ought to exist. But should a syllable of the chromatic melody be elevated by a discrete radical change, from the level of the current, to a third, fifth or octave above it; and when thus raised, be there made, however rapidly, through the interval of a semitone, it is evident that the plaintive or chromatic character must be preserved: and since the syllable, by a transfer of the radical pitch, is advanced to a higher point of the scale, it is by the additional means of acuteness, conspicuously impressed on the ear, and thus fully answers to the definition of emphasis.



*Of the Emphasis of the Downward Concrete.*

WE have said that the downward movement of the voice conveys the expression of surprise and positiveness, and is the mode of making a cadence on a single long syllable. But something further on the mode of applying this concrete, for the purpose of emphasis in the course of a current melody, is now to be learned.

The downward concrete is a mode of emphatic distinction; exerting in its wider intervals a powerful attraction over the ear. It can not however be applied to sentences of thorough interrogative intonation: nor is it in its simple forms used in the chromatic melody. When necessary in this latter case, for denoting surprise or positiveness, it may be introduced as a constituent of the unequal wave: for the rise of the semitone as the first constituent, will preserve the character of the chromatic melody; and a subsequent continuation downwards through the eighth, or fifth, or third, will join to this melody the peculiar expression of the falling concretes.

When I have had occasion, in its proper place, to speak of the descent of the voice, both by concrete and by radical pitch, I did not represent the fall, otherwise than as if it took place from the line of the current melody. It is now necessary to show a different mode of its movement. In the twenty-first section, I did however give a notation of the following line;—

Seems, madam, nay, it *is*! I know not seems:—

in which I marked one of its emphatic syllables with a downward fifth: the concrete appearing on the staff, with its radical the whole extent of that interval above the current melody. I then merely pointed out this peculiarity: for as I was taking a physiological view of the downward concrete, I did not wish to anticipate the history of this part of emphasis.

Now should 'is' in the above line be pronounced in the monad or feeble cadence; that is, should the descent through a third be made on this word as if it were the close of a sentence, it will not have that emphatic force (stress and time being aside in this consideration) which is required by the sense. It can not be, then, the simple descent of the voice from the line of the current melody, which gives impressiveness to this form of emphasis.

The full effect of the downward concrete, as an emphatic symbol, is produced by commencing its radical on a line of pitch above the current melody, and descending to that line or below it, according to the degree of expression. The height at which the outset or radical of the descending concrete is to be taken, depends on the degree of positiveness or surprise contemplated in the emphasis. That the expressive effects of the downward concrete proceed from its affinity to the nature of the cadence, I will not assert. It would seem however that there is something like an ultimate affirmation in a very positive assertion; it being as much as to say, this affirmation is beyond doubt, therefore let nothing further be said about it.

It may perhaps be asked,—why the downward vanish, emphatically used in the current melody, does not produce the effect of a cadence, and thus intersect the sense of discourse. It is to be recollected that the feeblest form of the cadence consists in the concrete descent through the third, consequently the downward emphasis can at most amount but to this feeble form. And it is to be also borne in mind, that the proper cadence is continued downward from the line of the current melody: whereas the emphatic downward concrete, begins at a point of pitch much above the line of the melody, and does not always descend below it.

*Of the Emphasis of the Downward Octave.*

AFTER what has been said generally of the downward emphasis, it is scarcely necessary to state that the octave, when set on a long syllable, gives the highest degree, of this species of emphasis. The word 'hell' in the following lines requires the octave :

So frown'd the mighty combatants, that *Hell*  
Grew darker at their frown.

This is taken from the fine description of the threatening hostility between Satan and Death, in the second book of *Paradise Lost*. And whoever gives this part with a forcible and somewhat dramatic effect, will find it impossible to bring out the full sense of the poet, except by the above directed intonation. The intention of the author, if I dare to interpret it, is not to represent, simply without marking its degree, an increase of darkness produced by the figurative gloom of the brows of the combatants. Such a picture would be too tame and trite for this dreadful edge of battle. The thought becomes worthy of the occasion, when the frowns, are said to be able to blacken the deep darkness even of Hell.

So much for the description and illustration of the concrete pitch of the downward octave. But the transition for the purpose of emphasis is made on immutable syllables, by a change of radical pitch from an assumed point above the current melody. The following passage from the second book of *Milton*, may serve for illustration :

Far less abhorr'd than these  
Vex'd Scylla, bathing in the sea that parts  
Calabria from the hoarse Trinacrian shore.

I know not how others might attempt to make out the picture of this first line : but I can in no way satisfy my ear with it, except by a concrete rise through the octave on 'far,' by giving 'less' at the top of that interval, and then descending by the discrete skip of an octave in radical pitch to 'ab ;' thus



returning to the level of the radical of 'far,' or to the line of the current melody. It is not the place, but I may here say that 'horr'd,' is to be executed in the concrete downward emphasis of the octave.

A similar intonation is appropriate to the passage which follows in the text of the poem.

Nor uglier follow the night-hag.

In the examples here shown, I say nothing of the modes of stress or of the aspiration which might be necessary for the full vocal display of these passages. My business is with that single element, the downward movement.

If it be asked,—why the descent by the radical pitch has not the effect of the cadencial close ; it may be answered,—that it does indeed approximate towards the nature of a cadence ; but it is still a feeble one, and not sufficient to cut off the sense of discourse. For the descent is from a point assumed above the current line, and the downward reach is to about the level of that line : whereas the true and final cadence is made by a descent of three tones below that line.



### *Of the Emphasis of the Downward Fifth.*

THE similarity of this element with the last, the difference consisting in degree only, renders it unnecessary to do more, than quote a phrase in which the less energetic emphasis of the downward fifth may be employed. The word 'courageous,' in the following extract from the dramatic contention between Gabriel and Satan, at the close of the fourth book of Paradise Lost, bears this downward fifth on its accented syllable.

Courageous chief!  
The first in flight from pain!

The radical change of the downward fifth is exhibited in the reading of the following lines, from the first act of *Julius*

*Cæsar.* In the second scene, after Cassius has brought out from Brutus a proud declaration of his love of honor, he says,

I know that virtue to be in you, Brutus,  
As well as I do know your outward favor.  
Well, honor is the *subject* of my story.

Now, supposing this to be the proper place for the emphasis, the sentiment here conveyed, that this honor is the *very matter* he desires to speak of, is to be made out by a downward intonation on the word 'subject.' But the accented syllable of this word is too short to bear the concrete. The expression is therefore to be accomplished through a discrete descent, by assuming the first syllable 'sub,' at a fifth above the current melody, and returning to the line of that melody, on 'ject,' by the radical skip of a fifth. Some other form of emphasis on this word may, in a manner, show the sense which is here assumed. But I am very confident, that to an ear of judgment and taste, none will give the bright picture of the sentiment, which is effected by the proposed mode of intonation.



### *Of the Emphasis of the Downward Third.*

THE downward Third expresses a more moderate degree of the same sense and sentiment, which are conveyed by the preceding intervals of the octave and fifth. Thus in the following reply of Hamlet, the word 'queen' does not seem to require a stronger emphatic distinction than is made by a falling third.

*Queen.* Have you forgot me?

*Ham.* No, by the rood, not so:  
You are the *Queen*, your husband's brother's wife.

And here I may take occasion to refer to the difference between the effect of the downward third, when employed as the means of emphasis, and as a feeble cadence. For if the word 'Queen' merely descends concretely, from the line of the current melody to a third below it, the sentence may pass for a complete one, terminated at that point by a feeble ca-

dence. But if the radical of this syllable is raised to a third above the current melody, and then brought down to it, in the manner of emphasis, a subsequent pause will not produce the like effect of a close.

The emphasis of the downward third by change of radical skip, may be made by a transition from 'that' to 'too,' in the following phrase.

*Cassius.* They shouted thrice; what was the last cry for?

*Casca.* Why, for *that too*.

Here the word 'that' is to be raised above the line of the current melody.

It was said formerly that the prepared cadence is produced by the downward radical change of a third, preceding the triad. Now, although in this case the voice falls to a third below the line of the current melody, still this descent alone does not produce a cadence. For the lowest constituent of this phrase of the third, if I may so call it, does not end in a feeble downward tone, but in an upward vanish, similar to the rest of the melody. This downward radical skip has all the effect of an emphasis, by forcibly impressing on the ear the most complete accomplishment of the close.

The downward minor third may be used for emphasis, under the same circumstances that admit the rising form of this interval. I perceive no difference in the effect, except perhaps that there is more gravity in the downward movement.

The downward second being a constituent of the diatonic melody, has no emphatic qualities. It serves to give variety to the current, by occasionally taking the place of the rising concrete. When given to the last constituent of a downward tri-tone, it makes the tripartite cadence.

The downward semitone has peculiarity sufficient to mark a strong emphatic distinction: but I am not aware of its being ever introduced, in a solitary manner, into the diatonic melody: and in the chromatic it merely serves the purpose of variety, similar to that of the downward second in the diatonic current.

*Of the Emphasis of the Wave.*

The junction of opposite concretes produces a positive effect upon the ear, which gives emphatic distinction to the words on which it is applied.

If one were to draw the rules of reading from the mass of mankind, and not from cultivated and rare examples of excellence, it would be necessary to add to the two formerly described kinds of melody, that of the wave: since there are many speakers who apply the higher species of this element of intonation, to every long and emphatic syllable of discourse. Such a practice, to say the least of it, certainly prevents the employment of the impressive kinds of wave, as the means of emphasis.

The wave expresses, according to its forms, surprise, interrogation, mirthful wonder, sneer and scorn: and is emphatically used on long quantities which embrace these sentiments.

The dignified diatonic melody is made, as has been shown, by the wave of the second: but this is only a method of adding the gravity of the downward second, to the lighter effect of the ascent of that interval; and of producing that length in syllables which is essential to solemn utterance, without incurring the risk of falling into the notes of song. Consequently this wave of the second can not be enumerated among the means of emphasis. The other waves of higher intervals serve also the purpose of giving time and dignity to utterance, by doubling the intervals of which they are respectively composed. But they have a striking peculiarity when heard in the diatonic melody: giving thereby to the words which bear them, an emphatic distinction.

If the sentiment of scorn is contained in dignified discourse, it is to be expressed by the use of the vanishing stress, or by aspiration, joined with either the simple rise or fall of the concrete, or with the direct or inverted form of the single wave. For there is a degree of levity and familiarity in the double wave, which is unsuitable to the kind of discourse from which we are here excluding it.

In considering the emphasis of the wave, I shall not attempt to illustrate all its forms. If the reader has been careful to follow me in the analysis of this element, he will be able to make



out all these things for himself : and there are too many varieties of the wave to justify any thing like an entire enumeration of them. I shall name a few species.

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*Of the Emphasis of the Equal-single Wave of the Octave.*

I can not at this moment give an example, from serious composition, of an octave in the above form. The piercing drawl of its intonation is only common in the play of vulgar snarlings, if indeed it is ever employed for any other purpose. It actively expresses surprise; and when heightened by the vanishing stress, aspiration, or guttural emphasis, it has the additional meaning of sneer and scorn. There is a difference in the effect of this symbol, according as it is made on a low or a high pitch of the voice. In the latter case, it has more of the character of raillery or mirthful comment than of canting contempt.

If the single-equal wave of the octave is inverted, the emphasis has the character of interrogation, from the ascent of the last constituent.

*Of the Emphasis of the Equal-single Wave of the Fifth.*

THIS element carries a degree of admiration, but less than that of the octave: as in the following example from the contest between Satan and Death.

And breath'st defiance here and scorn,  
Where I reign king? and to enrage the more,  
Thy king and lord!

Whoever will read the whole passage with the dramatic power which its composition justifies, will find he may set the element now under consideration, on the syllable 'thy,' as a full expression of the positiveness, vaunting authority and self-admiration of the Goblin.

In order to show the difference in character between this direct wave, and its inverted form, let the latter be substituted in the above reading. The interrogative effect produced by

the ascent of its last constituent, will not only obscure the soul of the poet, but absolutely cross out his sense ; for it will make Death ask a question, when he intends to be unanswerably affirmative.

I need not consume time by giving an example of the wave of the Third in its equal-single form. If we suppose an abatement in the degree of expression, all that was said of the character of the wave of the fifth, may be affirmed of it. It is more commonly employed than the fifth.

Nor need I say much of the emphasis of the direct and inverted wave of the Minor third ; since it is employed for a purpose similar to that of its upward and downward constituents. It is, however, more expressive and has a longer quantity.



### *Of the Emphasis of the Unequal-single Wave.*

I said formerly that the unequal wave is used as the symbol of admiration, surprise or interrogation, according as its course is direct or inverted : in the wide variation of the dimensions of its constituents, and in its junction with vanishing stress or aspiration or guttural emphasis, it becomes the most eminent mark of scorn. The last word of the following contemptuous retort of Coriolanus on the Volscian general who had called him a ‘boy of tears,’ might perhaps be given as an instance of the ascent of a fifth and the subsequent descent of an octave.

False hound!

If you have writ your annals true, 'tis there  
That, like an eagle in a dove-cote, I  
Fluttered your Volces in Corioli;  
Alone I did it.—*Boy!*

I say nothing here of the strong aspiration, necessary to blow out the scornful feeling of the speaker. I have heard this syllable pronounced on the Stage, with the simple downward emphasis. But there is more cool wonder and self-satisfaction in this intonation than belongs to the Roman's vexed baying of his revilers, and to his vehement retort of a charge of inconstancy, which he must have half acknowledged to himself.

In the following lines, from the contention between Brutus and Cassius, the word 'yea' may bear a direct-unequal wave, consisting of the rise of a tone or third, connected with the fall of a third or fifth.

For, from this day forth,  
I'll use you for my mirth, *yea*, for my laughter,  
When you are waspish.

If this word be given without aspiration, or vanishing stress, or guttural voice, I do not know that the expression will differ much from that of the equal wave. The sneer must therefore depend on the union of some one of these last named elements with the simple utterance.

The intonation of the italic-word 'wrong' in the following line, may be taken as an example of the emphasis of an unequal wave whose first constituent is a semitone; and the second a downward third or fifth, according to the force required by the sentiment:

You wrong me every way, you *wrong* me, Brutus.

I have turned over all the books within my reach without being able to find a sentence for illustrating a case of the double wave. Serious and elevated discourse can have all its purposes of feeling and sense fulfilled without it: and it is not the design of this essay to point out to children and drolls, the scientific mode of derisively imitating the surprise of their neighbours, by the curling mockery of this vulgar element.

I have nothing to say about the Time of the concrete as a means of emphasis. The variations of its time are perceptible by strict attention: but they are so closely united with the modes of stress, that the separate consideration of them would be an unnecessary refinement.



### *Of the Emphasis of the Tremor.*

The tremor may be applied to a succession of syllables, and thus, in a manner, constitute a tremulous melody. But we have here to consider its occasional application to one or two words in the current of speech.

When the tremor is made on a tonic element, in any interval except the semitone, it is the symbol of laughter: and consequently, in syllabic utterance it joins to the sense of the words on which it is set, the expression of joy and exultation.

Thou art the ruins of the *noblest* man,  
That ever lived in the tide of times.

There is a sentiment of exultation, and a superlativeness of compliment in this eulogy, which can not be properly expressed by the smooth movement of the concrete. The first syllable of the emphatic word '*noblest*,' when uttered with the tremulous intonation of the wave of the third or second, gives the vocal consummation to the feeling which suggests the exceeding measure of the praise.

When the tremor is formed of a single tonic, in the semitone or its waves, it constitutes the function of crying. When employed in the syllabic intonation of the chromatic melody it sets a more marked distinction on those emphatic words which express the sentiments of tenderness, grief, supplication, and other connatural states of feeling.

The following passage is taken from a dramatic part of *Paradise Lost*, in the tenth book; and if read with the personal action of the dialogue, calls for the highest coloring of the semitone, and of the tremulous movement.

Forsake me not thus, Adam! witness, Heaven,  
What love sincere, and reverence in my heart  
I bear thee, and unweeting have offended,  
Unhappily deceived! Thy suppliant  
I beg, and clasp thy knees; bereave me not,  
Whereon I live, thy gentle looks, thy aid,  
Thy counsel in this uttermost distress,  
My only strength and stay. Forlorn of thee,  
Whither shall I betake me, where subsist?  
While yet we live, scarce one short hour perhaps,  
Between us two let there be peace; both joining,  
As joined in injuries, one enmity  
Against a foe by doom express assigned us,  
That cruel Serpent. On me exercise not  
Thy hatred for this misery befallen;



On me already lost, me than thyself  
 More miserable? Both have sinned; but thou  
 Against God only; I, against God and thee;  
 And to the place of judgment will return,  
 There with my cries importune Heaven, that all  
 The sentence, from thy head removed, may light  
 On me, sole cause to thee of all this wo;  
 Me, me only, just object of his ire!

By the lines that follow in the poem, Eve is said to have 'ended weeping,' and her supplication, to have been accompanied 'with tears that ceased not flowing.' Now tears in speech are always made with more or less tremor. Should the semitonic tremor however be applied throughout the whole of this passage, the effect would be monotonous, and the characteristic concrete of speech would be lost in the agitated voice of crying. The mingled efficacy of these functions may be appropriately shown by using the tremor only on judiciously selected emphatic words. It may be well to remark that the above lines are not entirely subservient to the manner of delivery here suggested: for some of the syllables which carry the deepest feeling of contrition, have not sufficient quantity to allow the eminent intonation of the tremor. The word 'beg' and the accented syllable of 'uttermost' are of this nature; for though they admit of the tremulous function to a certain degree, still their limited time does not fully satisfy the demands of sentiment for a free extension of the voice. The words 'bereave,' 'only,' 'forlorn,' 'thee,' and 'more,' through their indefinite quantity give ample measure to intonation. On these then, and others which might be designated, the tremor may be effectually set, whilst the rest of the melody, not so marked, must have the smooth concrete of the semitone.



### *A Recapitulating View of Emphasis.*

UPON a close consideration of the foregoing subject, it will be found difficult to draw a definite line of separation between words which are emphatic, and the common run of the melody: in as much as some of the fainter cases of emphasis may scarcely differ from the simply accentual and temporal distinction of syllables.

To what case then is the term emphasis to be applied?—Not to that of every syllable which differs in any degree from its neighbour. For by this rule we may regard half the words of language as emphatic: since they are perpetually varying from others by slight degrees of force and quantity; and since some important elements of pitch when not assisted by time and stress, are occasionally applied to syllables, without producing thereby any extraordinary distinction. There are, however, certain characteristics of vocal sounds which unerringly call the attention of an auditory. High powers of stress, extreme length in quantity, wide intervals of pitch, and any peculiar quality of voice, when set on certain words, may be considered as the constituents of emphasis. But at what point in the respective gradations of these elements, the emphatic character begins, can not be assigned, and perhaps need not be known.

The subject of emphasis may be viewed under several aspects: and they are here pointed out, with the design to contribute towards future philosophical inquiry on this question. Somewhat more time than I dare devote to these matters, would be requisite for framing those general rules, which, in the prophecy of investigation, I can not but pronounce here, to be discoverable by industry and perseverance. But if enough has not been already said in this department, I am not unwilling to leave something to be said by others.

Emphasis has, in the preceding parts of this section, been regarded as expressive of certain sentiments and thoughts, through the agency of the several accidents of the voice.

Emphasis may likewise be considered in reference to its general Purposes. These are: First—To raise one or more words above the level of the rest of the sentence, without regard to their special relationships or antithesis. Secondly—To contrast certain words with each other, or to contradistinguish them. Thirdly—To supply an ellipsis, and thereby complete to the ear, that construction which is imperfect in grammar. Fourthly—To mark the syntax in those cases where it might be doubtful without the assistance of emphasis.

Another view of this subject might be grounded on an analysis of the parts of speech. Thus,—when an emphasis is

laid on the article, it contradistinguishes a subject as definite or indefinite, as singular or plural.—When made on a noun, it may either express a direct opposition between some of the various accidents of this part of speech ; or it may raise one substantive-thought above the rest of the sentence, without the immediate suggestions of any special antithesis.—On pronouns its distinctions are relative to gender, number, case and person ; or it may indicate, as on the article, the definite nature of a subject.—On the verb it may show the relationship of states of being, acting and suffering, of time and number ; or, may distinguish without palpable antitheses.—On the adverb it may give the contradistinctions of time, place, negation, affirmation and inference.—On the preposition it may mark the antithesis of motion, position and cause.—On conjunctions it may show the contrasts of conjunctive and disjunctive relations ; and of condition.—On the interjection, emphasis serves only for unrelated distinction, and does not, as far as I know, embrace an antithesis.

On the whole, whatever is the meaning of any part of speech, emphasis may not only raise it into importance, and contradistinguish it from some other meaning, but may likewise be employed to supply an ellipsis, and to point out the syntax.

I have read somewhere,—that every case of emphasis includes contrast. This certainly is not true of emphatic interjections, at least I am not able to discern the antithesis in them : and with regard to the cases included under the detail of the other parts of speech, there are many instances in which the contrast is not brought before attention, notwithstanding it is admitted that such antithesis is absolutely included in the thought.

It is not within the range of my design to illustrate all the cases of emphasis which have been set forth in the above survey of species, suggested by the philosophy of the parts of speech. I here exemplify only the four general heads of the Purposes of emphasis, given above.

First. The distinction of one word above others, without the striking perception of antithesis, is here shown.

*But see! the angry victor hath recall'd  
His ministers of vengeance and pursuit,  
Back to the gates of Heaven.*

This first phrase is interjective ; but I can not conceive with what ‘see,’ is in contrast. Surely Satan in drawing the attention of the *eyes* of Beëlzebub, did not mean to signify, that he should not touch, taste, or otherwise perceive the recall of the pursuit : And to suppose ‘see,’ to be in antithesis to his not having looked before, is a mere refinement. The case is the same with most interjections, whether they are properly the simple tonic elements, or with greater latitude, any of the several parts of speech.

Secondly. The marked antithesis is exemplified in the following lines :

I yielded, and from that time see  
How *beauty* is excelled by *manly grace*  
And *wisdom*, which alone is truly fair.

This is the most frequent form of emphasis.

Thirdly. The use of strong emphasis in an elliptical sentence is remarkable in the following instance.

Into *what* pit thou seest!  
From *what* height fall'n! so *much* the stronger proved  
He with his thunder.

Taking these lines as a complete construction, they are ungrammatical, and unintelligible. It is scarcely necessary to suggest that the poet meant to say——see to what a dreadful pit we are doomed, consider from what an immeasurable height we have been hurled, and the degree of his superior strength may be proved. Or thus——as far as the horrors and the depth of this pit are removed from the bliss and height of heaven, so far has the thunder of the Almighty surpassed the strength of our arms. Now, this full meaning can be clearly brought out from the elliptical phraseology of the poet, only by one mode of intonation. If the word ‘what,’ in its two places be given with an emphasis of the downward octave, forcibly aspirated, and with a loud concrete ; and if the succeeding words within the notes of admiration, be also intoned with downward vanishes, the true astonishment of the sentiment and the measure of the conquest will be shown.



And further, if a cadence and a pause be made at 'fall'n,' and if 'so much' be strongly emphatic, the reference of the comparison to the strength of the thunder, will be perceived ; and the sense will come upon the ear, in that laconic eloquence with which it was condensed and felt in the imagination of the poet.

Fourthly. When the structure of a sentence is so much involved as to produce a momentary hesitation in an audience, about its concord or government, the syntax may be rendered perspicuous by means of emphasis, as in this example :

He stood, and called  
His legions, Angel forms, who lay entranced  
*Thick as Autumnal leaves* that strow the brooks  
In Vallombrosa, where the Etrurian shades,  
High over-arched, embower ; or *scattered sedge*  
*Afloat*, when with fierce winds Orion armed  
Hath vexed the Red-sea coast.

If this passage stood thus 'Thick as autumnal leaves, in Vallombrosa, or scattered sedge afloat,' &c. there could be no hesitation about the construction. But the chain of parenthetic specifications between 'leaves' and 'or,' together with the picturesque association, and the beauty of the phraseology,—makes us for a moment lose sight of that intended transition to another subject of illustration, which should be immediate and perspicuous. For the substitutive sense of the conjunction 'or,' is not at once so plain, that the phrase 'scattered sedge,' might not, in the moment of utterance, be prospectively taken as a nominative in some new course of the subject. But if the clause 'thick as autumnal leaves,' which shows a comparison, be emphatically raised into memorable notice, and if the succeeding words, extending to the semicolon, be hurried, yet becomingly, the subsequent emphasis on 'scattered sedge afloat,' will at once refer the ear back to the last similar distinction of the voice, on 'autumnal leaves,' and thus indicate that the angel forms lay likewise as thick as the scattered sedge afloat.

This element of expression, for so it is, was called, in the section on Grouping, the *Emphatic tie* : and certainly in the

present case it has no other object than to join these dissevered thoughts ; since in a more natural and perspicuous connexion there would be no call for the emphatic distinction.

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Having thus enumerated the various modes of time, quality, stress and intonation, by which certain words or syllables are brought conspicuously before the ear, the reader is prepared to receive the term emphasis with a wider definition than is usually given to it.

Emphasis is a generic term for the extraordinary impressiveness of the sense or sentiment of words : the species of impression being founded on the varied accidents of the voice.

From this view it appears, that Emphasis, and what we have called Expression, may be considered in most cases, as convertible generic terms : since emphatic words differ from such as are unemphatic, through those functions which constitute the proper expression of speech.

The preceding analysis will enable us to display the whole compass of the art of reading, with some amplitude of plan and accuracy of delineation. Words, as symbols of meaning, may be considered under three aspects : as representatives of simple thought ; as indicative of an enforcing of thought ; and as expressive of passion. The progress of the voice in speaking, is called melody. The course of melody under the direction of simple thought, is through the interval of a tone in the radical change, with a concrete rise of a tone from each of those radicals. But the portions of discourse which represent simple thought, are limited : those thoughts are to be enforced, and passions are to be expressed. The tenor of the simple diatonic melody is therefore often interrupted, by an occurrence of higher intervals of the scale, both in the concrete and discrete forms. Thus it appears that those transitions of pitch which were called phrases of melody, and were said to be seven in number, are multiplied by the use of some of the above mentioned elements of emphasis. For on the principle which suggested the name of the ditone, we have by the employment of the radical change of higher intervals, the Phrase of the Third, and Fifth, and Octave, both in an upward and downward direction.

If the reader has understood rightly the description of the functions of the voice, the pages of the historian and the poet, will suggest to him the occasions for their application. The ways of simple narrative, the places and modes of stress and of intonation, have been exemplified, in reference to the sense and sentiment of discourse. If the scheme is sufficiently clear, the reader may trace the general outline of speech : and if his mind is large and liberal enough to let in other thoughts than those of interest and daily fame, he may herein possess and enjoy, at least the picture of a simple and beautiful system of nature, if he can not by practical means offer it for sale or applause.

The possession of a good ear, together with a resolute practice, will be necessary for the precise recognition, and skilful employment of the enumerated elements. But a full understanding of the mere theory of speech, as laid down in this essay, without an accomplished practical execution of its rules, will enable one to overlook the exercises of others, with the decisive commendation or censure of an intelligent criticism : to carry the steady arm of principles, against the self-conflicting councils, and changeful orders of authority : to hold out against error with the real defences of opinion ; and to associate the delightful but passing perceptions of the ear, with the continued and busy pleasures of mental discrimination.

When the ingenuous reader reviews the preceding history, I must beg him to bear in mind its object. The purpose was to analyze the functions of speech, without a strict limitation of the search to those points which might be readily cognizable in ordinary utterance, or practically important in oratorical instruction. I have recorded no phenomenon, the discovery of which has not been the result of patient observation and experiment. There are many parts of the detail that will at once be recognized by the competent critic : others will be afterwards received into the growing familiarity of his inquiry : whilst some of the descriptions, even if admitted to be true, will still be considered as niceties of disputable application, and beyond the assigning power of rule. As a physiologist, I conceive I have done no more than my duty in this record, however presently useless some of its minutiae may be. Much of the accumulated wealth of science is not at interest ; but the

borrowers may one day come. I am ready to admit, that some distinctions in this history, may be practically disregarded. Thus I have described the several forms of stress as palpably differing functions ; and they are absolutely so made in speech : yet I have not ventured to insist on the importance of the difference in all cases. So in the discrimination of the intervals of the scale, I have endeavoured to give the true physiological account of these functions : but I have not taken upon me to exclude the fourth, sixth and seventh from the speaking voice. Nor would I wish it to be thought that some of the intervals of intonation, may not on occasions, be used as substitutes for each other, without affecting the force or precision of speech. I was also far from ascribing particular expressions to the numerous possible forms of the wave.

In thus opening the way for a change of elocution from an imitative art, with its inherent defects, to a science with all its constituent usefulness and beauty, it was necessary to set forth every existing function : that the materials might thereby be furnished towards the future establishment of a system of instruction, for those who have the rare aim in scholarship of seeking high accomplishment, through the abundant encompassing of principles, and the condensing economy of systematic means. That the inquiry into this subject has produced much that will be imperceptible to the first scrutinies of the general ear, I must be convinced from the past history of human improvement. The work of vocal mystery, has been at all times so despairingly abandoned, as beyond the reach of analytic perception, that this supposed impossibility alone will form a heavier argument against its admission, than the real but surmountable difficulty of encountering nature in new fields of sensation. Many who in fine organization of ear, and a capability of delicate analysis, possess the means of successful investigation will, too probably, shrink from the labours of experiment, and seek to justify infirmity of resolution, by defensively assuming the hopelessness of trial.



## SECTION XLVI.

*Of the Drift of the Voice.*

HE who listens to a good reader, may perceive that his voice is not only adapted to the varying indications of the sentiments which lie in individual words, but that there is a style in the movement which runs through the parts or the whole of a discourse; is accommodated to its reigning sentiment or spirit; is identical during the prevalence of that spirit, and changes with its variations. Every one recognizes this difference in manner between a facetious description, and a solemn invocation from the pulpit; between the vehement stress of anger, and the well known whining of complaint. It is to this continuation of the same style, whatever the repeated element or elements may be, that I apply the term *Drift of the voice*.

On this subject I have no new modes of utterance to describe: the preceding history furnishes all the elements that respectively join to make the various drifts of discourse. I am only about to enumerate these drifts and refer them to the heads of their several constituent elements; that in this essential part of elocution the scholar may have a definite perception of his duty, and a knowledge of all the means by which it is to be accomplished. This subject is not unnecessarily specified by a name; nor is it uselessly offered to the studious attention of the reader: for if a particular drift is required throughout a portion of discourse, or the whole of it, any interruption of the assumed tenor, will offend the ear; or at least will be a failure of the aims of elocution. Thus, when the sentiment is plaintive and consequently demands the semitonic intonation, the introduction of a tone or second will be no less disagreeable, than an offence against time and tune in music.

The real existence and effective operation of drift being admitted, the question before us is—Upon what functions of the voice it is founded; and how many different forms may it employ?

I have described all the functions of the voice which are known to me; the nature of drift must, therefore, in my view, be resolvable into the enumerated elements of speech. These elements have been considered under the modes of their individual construction, their expressive meaning, and their application in the limited sphere of emphasis. Our present view of them regards their distinguishing effect when continued in a current melody.

The question,——How many different styles the drift may assume, is to be answered by ascertaining which of the elements can be heard in succession on any indefinite number of syllables, without offending the ear by monotony : for there are some which can not be repeated without producing this disagreeable effect. As a general proposition, it may be asserted that most of the specific forms of time, stress and intonation, may, as occasion requires, be applied in continuation without violating propriety or taste. There are again, some elements which we dare employ only on a few or on solitary syllables, and which can not therefore make a drift in discourse.

On the subject of this successive use of the elements, it is necessary to remark, that though the peculiar character of the drift may be sustained throughout a whole sentence, yet the function which produces it, can in some cases, be executed only on certain syllables. Thus, in the expression of dignity by means of long quantities, the unaccented syllables can not bear a protracted time : still the character of dignity will prevail, even with this limited application.

Let us enumerate the various kinds of drift.

*The Diatonic DRIFT.* The diatonic melody was said to be that mode of utterance which is used for simple narrative or description ; being destitute of the marked expression that respectively belongs to question, argument and passion. The style of this melody is produced by the concrete rise of a tone, and by a change of radical pitch through the same interval. The employment of any other element in discourse of this kind, would be disagreeable. Suppose, for instance, an advertisement in a gazette to be read with the solemn drift of a protracted quantity, or in the plaintive style of the semitone ; no one would be in doubt concerning this improper application of time and intonation.

In the usual course of the diatonic melody, perhaps the upward concretes predominate: the downward vanish of the second, being occasionally introduced for variety; but when required by the gravity of the subject it may without monotony constitute a drift.

*The DRIFT of the Semitone.* I said enough formerly on the subject of the chromatic melody; it exemplifies the present head. This style is spread throughout discourse of a plaintive, tender, and supplicating character. It was proved in its proper place, that every interval is practicable on every kind of quantity. The semitone, therefore, in its drift is heard on every syllable however short: and even though unaccented.

*The DRIFT of the Downward Vanish.* It was said the falling second is sometimes used as a drift. The downward third and even the fifth are occasionally heard in continuation. Their currents express surprise and confidence, and when enforced by stress, a warmth of conviction and temper. The following indignant argument from the pleading of Volumnia in *Coriolanus* bears the downward third throughout.

Come let us go:

This fellow had a Volcian to his mother;

His wife is in Corioli, and this child

Like him by chance:—

A continuation of the downward intervals, forms, as we have seen, the drift of exclamatory sentences.

*The DRIFT of the Wave of the Second.* This element is used in continuation on long quantities, for occasions of solemn, deliberate, and dignified speech. I do not say this wave may not be passed through on syllables of moderately protracted time, and even on those which we have called mutable: but it is on long-drawn or indefinite quantities that the effects ascribed to it as a drift, become conspicuous.

*The DRIFT of the Wave of the Semitone.* This is the most common form of the semitonic style; since the sentiments associated with the chromatic melody generally call for slow time and long quantities. Upon the subject of this and of the preceding head, we must bear in mind that both the direct and inverted modes of these waves are used interchangeably in their respective melodies.

*The DRIFT of Quantity.* The most attractive styles of speech are formed of the accident of Time. In discourse containing the sentiments of gaiety, mirth, anger, and other similar emotions, the utterance is quick, and this is generally combined with the simple concrete of the second, together with the radical or vanishing stress. The drift of long quantity is set on solemn, plaintive, and dignified composition.

One might make a threefold division of the temporal Drift; into that of—quick,—median, and—slow time.

*The DRIFT of Radical Stress.* In the section on emphasis I pointed out the sentiments which require the application of this radical force to single words. But these sentiments sometimes prevail throughout discourse, and consequently the element of stress which they assume in continuation, imparts to melody the character of a drift.

*The DRIFT of the Median Stress.* This is necessarily connected with long quantity; and generally with the wave of the second and semitone. Its drift is not very distinguishable from that of the last named elements: for a protracted time on these intervals is always the sign of that dignity which generally admits the use of this median swell.

*The DRIFT of the Vanishing Stress.* This element was shown to be applicable to all the intervals of the scale. But as a drift it can be employed only on the rise and the wave of the second and semitone, and on the downward third and fifth. The vanishing stress whether in the diatonic or chromatic melody, marks a considerable degree of energy in sentiment; and communicates to the current of discourse a style of utterance which can not be mistaken.

*The DRIFT of Force.* Loudness and Softness when respectively heard in continuation, do so impress the ear with their distinct peculiarities, as to constitute styles of utterance; and the failure to fulfil the demands of sentiment on either of these points, must be included among the faults of speech.—Who will deny that there are some occasions, on which the drift of comparative softness of voice would be entirely ridiculous: and others again, on which that of loudness would be disgusting bombast!

These ten modes of drift do, by the continued use of their respective elements, impress a peculiar characteristic on extended portions of discourse.



Of the other elements none are allowable in that continuation which, according to our previous account of drift, would constitute a current style. And yet the application of some of them to phrases, extends so much beyond the limits of emphasis, that they deserve a place next in order to the real drifts. If the reader is disposed to give them a name, founded on their nature, they might be called Partial drifts: thus we have,——

*The Partial DRIFT of the Tremor.* I have hinted that the tremulous movement is proper only on short passages,— passages of syllabic crying if I might so speak; but that it would be monotonous if kept up through a long line of discourse. And here let it be understood that though a drift is by its nature a monotony, or continuance of the same voice, still it is rather satisfactorily expressive, than disagreeable when made on certain elements. The tremor however is not one of them.

*The Partial DRIFT of the Aspiration.* The sentiments which give rise to this symbol are like those of the preceding head, generally limited to temporary portions of melody. When so applied, the character of utterance justly entitles it to the name of drift.

*The Partial DRIFT of the Guttural Emphasis.* The scornful feeling which calls for this element, is sometimes continued for more than the time and the solitary occasions of emphasis; and thus makes a partial drift.

*The DRIFT of Interrogation.* The reader may recollect that the third, fifth and octave are the intervals of intonation in a question. The partial form of their use in interrogation, so rarely exceeds the employment of them in emphasis, that they can scarcely in this case be entitled to the name of drift. But in those questions which are of declarative construction, or that otherwise demand the thorough intonation, the predominance of these wide and impressive intervals gives that peculiar character which the common ear at once perceives and comprehends. Still as questions are but portions of discourse, and as these high intervals are never used in continuation for any other purpose, this form of drift must be considered as partial.

*The Partial DRIFT of the Phrases of Melody.* The

Monotone and the phrase of Alternation are sometimes severally used in continuation on certain portions of discourse, of greater extent than those to which these phrases are appropriate, in the plain and more common construction of the current melody. In a former section peculiar expressions were ascribed to these two phrases when continuously employed: consequently when such a condition of the melody occurs, it gives, according to its nature, the partial drift of the monotone or alternation.

It may be made a question, how far Quality of voice, when given to a part or the whole of discourse, might constitute a drift. The fulness of the orotund may impart to utterance a character of dignity which is at once distinguishable from the meagre huskiness and forceless efforts of uncultivated speech.

The compound stress and the loud concrete differ so slightly from the radical and vanishing modes of force, and from each other, that it would be a mere refinement to found styles of drift upon them.

Such then are the elements which may appear throughout the whole of a discourse; or be set restrictively on one or a few sentences.

There are a few elements of which a drift can not be made.

It was said that interrogative sentences of the Thorough kind might be regarded as carrying a partial drift of the third, fifth or octave. But with the exception of this case, these intervals are never in correct speech used in continuation. The minor third, though a plaintive interval, is too peculiar in its kind to be tolerated as a drift. Its effect will be shown when we treat of the faults of speakers.

As a current style of the simple movement through these wider ranges of the scale, is forbidden in melody, so the combination of them into the higher kinds of wave, can not be extended beyond the limited places of emphasis. There is however a drift of this kind observable as a fault in readers: nay, some, in their formal efforts, can command no other style of intonation. But the least cultivation of ear rejects the repetition of these florid elements.

I need scarcely say, the emphatic vocule can not be made the basis of drift.

There is a prominent feature in the art of reading, which

seems nearly related to the subject of this section. I mean the notable change of voice in the transition, by a good reader, from one paragraph or division of discourse to another. It may be supposed that this point is already included in the foregoing history of drift. When any strong or peculiar sentiment is contained in the new paragraph, it will indeed be marked by the required style. But without seeing the page, we can sometimes perceive that a reader is passing to a new subject, even where there is no striking alteration of expression : and where the plain diatonic melody continues in use after the transition.

In such cases the peculiar effect is produced by several agencies. First—By the period which precedes the change, being made with that most complete close which we called the prepared cadence. This indicates the termination of the subject in hand, and thereby implies the introduction of a new one. Secondly—By a pause longer than that between sentences which are nearly related to each other. Thirdly—By the succeeding sentence or paragraph beginning at a pitch above or below the line of the previous current. Fourthly—By a striking effect from the phrases of melody applied to the outset of a new topic.

These vocal indicials make the change of subject obvious, in those cases in which a peculiar construction of the commencing phrase defers the development of its sense, and renders it impossible to discover by the few first words, whether the proximate sentences are immediately or remotely related to each other.

From a review of this subject, it appears, that many of the elements of expression may be in continual use, without producing a monotonous effect : that some can carry their drift but to a certain extent, whilst others do not bear an application beyond the solitary place of emphasis. It appears, too, that those which are inadmissible as a general characteristic, are elements of very striking properties, reserved for the higher purposes of emphatic distinction. Thus the downward eighth has the most impressive intonation ; and is never used in drift. The case is similar with the higher forms of the wave ; and the rising third, fifth and octave, when not employed for interrogation.

After what has been said, a little attention will show that several styles may exist at once in the same melody. Thus the drifts of the second, of short time, of the radical or the vanishing stress, and of loudness may be united. In like manner we may have a combination of the drifts of the wave of the second, of long quantity, of the median stress, of loudness or of softness. In short, the reader can ascertain which of them may be associated, by knowing the compatible qualities of the several elements : for they are united in the practice of the voice, in every possible way.

I have not thought it necessary to give extracts from authors to illustrate the various kinds of drift. After all that has been said of the accidents of the voice and their species, in former sections, together with the foregoing history of their application in a continued style of speech, I need not waste time on those explanations which the intelligence of the reader will easily supply. For I am not less solicitous to restrict the number of the pages of this essay, than to extend the measure of its instruction.



## SECTION XLVII.

### *Of the Vocal Signs of the Passions.*

I HAVE already given a physiological description of the functions of the voice, and have pointed out their expressive powers as far as they denote simple thought, sentiment, feeling, emotion, or any other named condition of the mind. This should satisfy the reader ; since it describes in its own general way, all that to me, at least, is audible and capable of measurement. But former systems of elocution having embraced an inquiry, however fruitless, on the delineation of the passions in speech ; such a view, though superfluous after what has been said, may perhaps be demanded at my hand.



There is a hypocritical compliment always paid to originality, the contradictory spirit of which is, that mankind are eager to receive what is new, provided it is told in the old way. I can imagine that a few of my readers, even after all I have written on the elements of expression and the sentiments represented by them, may still, through the influence of habit, ask for a separate chapter on the passions. Having therefore fulfilled my duty to the subject, by saying in a general way what was necessary, about the *thing*, I am now going to satisfy a prejudice by a formal detail under the *word*. But let it be distinctly understood, that this is done only for the purpose of giving another aspect to the subject of expression: and not in a forced or politic submission to any expected perversity of criticism. - I observe and write for those who have the intelligence and candor to admit a history of the development of nature, even though they may not be at the pains to make the discovery for themselves. And I hope it may always be far from my wishes, to bring into subjection to authority or prejudice, that truth and energy of philosophy which will always rule when suffered to operate: that philosophy which weak men compliment, by coveting its honors: and which would, ere now, have been effectually employed to make us both wiser and happier than we are, if a perfect home-bred contentment did not prevent its votaries from urging its benefits on the unwilling world, with all that art and perseverance through which stirring vanity, that knows no retired comfort, forces its worthless labors on mankind.

I took upon me (it is hoped not presumptuously,) in the introduction, to represent our knowledge in some of the departments of elocution, as limited; and I have adhered to an early resolution to avoid quotation, not only because its duties are tiresome, but because in these departments there is much that is unintelligible, and more that is erroneous. I am now about to leave, for a moment, the beautiful prototype of nature, to contrast her lights, with the mysterious shades of the opinions of men.

No author, I believe, has paid more attention to intonation, particularly as regards its practical application, than Mr. Walker. Indefinite as he is on this point, he far exceeds in precision and useful rule, all that is said by Aristotle, Cicero, Dio-

nysius, Quintilian and the old musicians. It is true, Mr. Walker owes his superficial analysis to them : but in his account of the application of inflection, if not in the real knowledge of it, he fairly ‘treads upon that Greek and Roman glory,’ which national vanity first proclaimed, and the subsequent credulity of European scholarship was simple enough to magnify and repeat.

But let us hear what Mr. Walker says of the vocal representation of the passions.

‘It now remains,’ observes this author,\* ‘to say something of the passions and emotions of the speaker. *These are entirely independent on the modulation of the voice*, though often confounded with it : for modulation relates only to speaking loudly or softly, in a high or in a low key, while the tones of the passions or emotions mean only that quality of sound that indicates the feelings of the speaker without reference to the pitch, or loudness of the voice.’

Again in the hundred and sixty-sixth page.

‘The truth is, the expression of passion or emotion consists in giving a *distinct and specific quality* to the sounds we use, rather than in increasing or diminishing their quantity, or in giving this quantity any local direction.’

And again in another work.†

‘As to the tones of the passions which are so many and so various, these in the opinion of one of the best judges in the kingdom, *are qualities of sound* occasioned by certain vibrations of the organs of speech, *independent on high, low, loud, soft, quick, slow, forcible or feeble.*’

It often happens with the aspirants after science in the schools, as it did with those who underwent the mummary of admission to the mysteries of Eleusis,—to hear themselves addressed in an incomprehensible language. What instruction for instance can be gathered from this definition?—‘The tones of the passions mean only that quality of sound that indicates the feelings.’ Here instead of an explanatory description of a thing, we are presented with a truism in a paraphrase.

\*Elements of Elocution, page 308. Am. Ed.

†Observations on Greek and Latin quantity, appended to Walker’s Key to the pronunciation of ancient proper names.

For, as the terms 'passions' and 'feelings' are here synonymous, as well as those of 'tone' and 'quality of sound,' the proposition may stand thus: 'the tones of the (or the tones which indicate the) passions, mean only the tones which indicate the passions:' or with less waste thus; 'the tones of the passions are the tones of the passions.'

But the second extract seems to contain a real distinction between the subject and the predicate: because by 'quality' the author may mean that accident of sound, which in this essay was specified by the terms—full, harsh, soft, slender, natural, falsette, whisper and orotund; for these are the only existing qualities of sound, besides those which Mr. Walker has excluded from the definition. But if pitch, which is here meant by 'local direction,' be denied a place among the symbols of passion, what shall we say of the comprehensive class which includes the pitch of the semitone—the rising intervals which signify interrogation—the downward vanish which conspicuously marks the various degrees of surprise? And in short, what is to be said of the effect of the different measures of time, and the various degrees of stress, if speaking 'loudly or softly,' and 'increasing or diminishing the quantity' of sound have nothing to do with the vocal expression of passion?

But the secret cause of this determination to exclude intonation and stress and time, from among the signs of the passions; and the reiterated attempts to resolve their symbols into a certain unexplained *word* called 'quality,' is clearly manifested in the last quotation: for here this opinion on the physical agency of quality is ascribed to 'one of the best judges in the kingdom.' The fact is, this confused notion concerning the passions was adopted upon authority, by Mr. Walker: and this mode of faith, certainly did not accord with his repeated claims to originality of observation. An original observer holding himself responsible for his report, cross-questions the testimony of his senses: but the borrower of opinions is less scrupulous, because he never stands security against the folly or mischief of his promulgations.

What has been recorded in the previous history may induce the reader to smile at the above quotations; and enable him to perceive that the symbols of the passions, consist of the Quali-

ty or Force or Abruptness or Time or Pitch of the voice ; and that the greater part of their symbols are derived from those very accidents, which are declared by Mr. Walker to be unoperative in the causation of impassioned utterance. With regard to the ' specific quality ' here assumed as the vocal material of expression, I am utterly at a loss to understand whether those modes of sound which are called qualities in this essay, are the same which are meant by Mr. Walker's term ; since his account of quality is complicated with an attempt to derive its proximate cause, from an unintelligible system of vibrations.

Let the whole pass as an instance of that unnatural paternity in instruction, which when asked for bread, dispenses nothing but a stone. And at the same time let it justify any unbecoming expressions which may have escaped me, when unavoidably brought into contact with those errors of indolence or authority, which are almost unpardonable.

In recapitulating the subject of expression under another title, it is not my intention to go into a dissertation on the nature of the passions, or to contend with authors about the scheme of their arrangement. I shall give that account of them which will answer the purpose of the present section, without designing to regard other relationships which they may hold.

The human mind is the place of representation of all the existences of nature which are brought within the scope of the senses. These representatives are called ideas. These ideas are the simple passive pictures of things ; or they exist with an activity, capable of so affecting the physical organs as to induce us to seek the continuance of that which produces them ; or to avoid it. This active or vivid class of ideas, comprehends the passions. The functions of the mind here described, exist then in different forms and degrees, from the simple idea, to the highest energy of passion : and the terms, thought, sentiment, emotion, feeling and passion are but the verbal signs of these degrees and forms. Nor does there appear to be any line of classification, for separating thought from passion : since simple thoughts without changing their nature, do from interest or other incitement often assume the color of a passion.

Such being one of the many views which may be taken of



ideas, we pass to the consideration of the effects produced on the physical organs by those thoughts or feelings, constituting their sensible signs or expression. These signs are various, but we are at present concerned only with those belonging to the organs of the voice.

Some of those conditions of the mind which we have called passions are possessed by man in common with the inferior animal creation. These have their expression seated conspicuously in the voice and in other muscular functions.

Again, some states of mind are the product of human intelligence and of the social relations. These are destitute of such signs as nature seems to have allotted to her own original creations. Thus, there are natural expressions both in the vocal organs and in other parts of the body, for pain, surprise, and anger; but none of any definite character for hope, contentment and gratitude.

From this view, we learn that there are two essentially different modes of expressing the various states of mind: since some of these thoughts, emotions, passions, call them what we will, are made by certain forms of stress, time, quality and pitch, joined to syllabic utterance; whilst others can be indicated only by conventional terms, which do not carry any of the natural vocal-signs of expression.

Thus we signify surprise by the downward emphasis, and complaint by the semitone; and the meaning of these symbols is the same in all nations: but we can express a sentiment of gratitude or irresolution only by describing our state of mind, in those arbitrarily appointed terms which may vary in every different language.

Though it appears we have not a peculiar vocal sign for every state of mind, yet it is to be remarked that all thoughts or passions may be expressed by the conventional language: for one can tell another that—he is astonished, in the most simple style of intonation, and thus convey the knowledge of the existence of that sentiment, as well as he can by the most striking use of the downward octave, which is its natural symbol. When astonishment is to be represented on a word or phrase, which does not describe it, it is necessary to employ the peculiar intonation which indicates this sentiment.

One of the consequences of there being instinctive signs in

the voice, for the expression of passion, and artificial signs in language, for the same purpose, is that one vocal function can represent two or more passions, or degrees of passion ; for though the kind of intonation is the same, and therefore in itself can not denote different species or shades of meaning, yet the conventional terms serve to mark the variety. Suppose for instance, one should say 'be gone,' with the strongest downward vanish of the octave : and again, with the same intonation, 'I am astonished ;' the difference between these two emotions of command and astonishment, would be distinctly represented under this identical intonation, by the words in which they are severally conveyed. Thus too the same semitone is used for the expression of pain, discontent, pity, grief and contrition : and yet in all these cases the different sentiments are marked by the conventional language on which the semitone is employed.\*

\*A union of the Verbal and the Vocal modes of expression, if I may thus distinguish them, seems to be so essential, that it is difficult to determine which is most significant in conveying the sentiments of the speaker. The power of giving a different meaning to the same word, by its mode of stress or intonation, would imply that the instinctive signs are more effective than the conventional. But there are other circumstances which warrant a conclusion, that we are as much indebted to the descriptive agency of words, as to any abstract movement of the voice.

I shall hereafter show, in the analysis of song, that every function of speech is employed in its higher style of execution : and though it is true that the semitonic movement in song has a plaintive expression, even if unconnected with words, still the rising and falling concretes of the third, fifth and octave, when not joined to discourse which coincides in sentiment with the expression of these intervals, are constantly heard in song, without producing the audible characteristics of interrogation, positiveness or surprise. The various forms of stress too, which have their proper expression in syllabic utterance, seem to be almost without meaning in the inarticulate movements of song.

But a still more striking view of the power of language, as contrasted with abstract intonation, is displayed in the vocal functions of brute animals, and particularly of birds.

When a familiarity with the analytic scheme of this essay will have given to the ear a facility of discrimination, it will be perceived that birds, in their notes, employ all the intervals of the concrete movement without suggesting the sentiments of surprise, interrogation, positiveness and scorn, together with the repose of the cadence, which would be eminently conveyed by those intervals, when joined with words that describe these several sentiments. The representation of plaintiveness by the semitone, as in the voice of the dove, and of pleasure by the tremulous scale, as in the horse when snuffing his food, is indeed made without a syllabic sign, and

I have had occasion more than once to show that the elements of expression are always applied in combination. There must be at least two conjoined and there may be more. Thus the different forms of stress are necessarily made on an interval of pitch; it is the same with guttural emphasis and aspiration. The intervals of pitch must be united with the accident of time, whether the quantity be long or short. Not one vocal element can exist separately; but several are sometimes combined in a single act of utterance: for we may have under one syllabic impulse, a long quantity, a wide interval, aspiration, and some one of the modes of stress, all simultaneous in effecting a particular purpose of expression.

yet is identical with the display of these feelings in the human voice; but it must be recollected that laughter and crying are generally inarticulate, and are thus merely animal signs.

It is then the union of an arbitrary verbal description of a sentiment, with the natural sign of it, which constitutes the true means of expression in the human voice.

I must here beg the reader to excuse a momentary digression from the subject of speech. In the course of this essay I might have shown many analogies between the human voice, and that of inferior animals: but I designed to avoid mingling these two subjects of natural history.

Speech is but an aggregate of the functions which are dispersedly exercised, by all animals: for there is scarcely a mode of quality, abruptness, time, force and intonation, which is not common to man and to the brute. Man possesses more vocal signs than any one species of animal, but perhaps less than all: the principal difference consisting in his power over the structure and chain of the syllabic function.

Upon the ground of this identity, and with the light of the describable measurement, and definite nomenclature of the human voice which is set forth in this essay,—*What is there to prevent the voices of animals being taken into view, in the systematic arrangements of Zoology?*

Naturalists have sometimes attempted this in a rude way, by a reference to alphabetic sounds, and to the modes of time and stress in words and phrases. When boys find a resemblance in the whistle of the partridge to the words 'bob white;' and think they pronounce the short song of the 'whip-poor-will' in its name, the similarity lies in the stress and the time of utterance; for this song, as well as many mechanical noises, resembles, at the whim of the listener, any phrase which has an equal number of syllable-like impulses, and the same condition of quantity and accent.

Birds in the endowments of voice, have—a Single Chirp—a Phrase of two or more notes; and—a continued song which may be distinctively called their Melody. Some birds have only the chirp; others, the chirp and phrase; and a few, the chirp, phrase and melody. Now I am sure that a person of cultivated ear,

I now go on to give a summary of the modes of thought, variously called, sentiments, emotions, feelings and passions, which are severally signified by their instinctive or appointed vocal symbols. And first of—

*Feebleness of Voice.* This element of expression is contradistinguished from strength or loudness, and is here spoken of as a Drift, or as applied in continuation to discourse. There are some states of mind connected with feebleness of body, that are properly portrayed by feebleness of voice. The expression here in view does not admit of the higher intervals of intonation, nor of the impressive modes of stress; for these, and indeed other elements that might be mentioned, imply an energy which, by the very terms of this head of our subject,

with the light of classification and description contained in this essay, would find no great difficulty in discovering, whether the chirp of a bird is in the concrete or radical pitch of a semitone, a second, or other interval; of how many movements the phrase consists, and what are their places of pitch; and of what combination of phrases the melody is made. As far as observation extends we know that the voice of birds is unchangeable in the species: it is therefore as well entitled to nomenclature, provided it can be assigned definitely, as the feathers, beak and claws. If analysis had never furnished discriminative names for color and form, even these characteristics, like those of the voice would never have been known in the descriptions of ornithology.

Without extending our observations to the whole range of animals, among which all the accidents of the human voice, even to the protracted radical and vanish of song are found, I here give an outline of the vocal functions of the Mocking-bird, as illustrative of the powers which generally belong to its class.

The Mocking-bird has every variety and degree in Quality of voice from the delicate chirp of the sparrow, and harsh scream of the jay, to the guttural bass of the clucking of the hen. He uses every form of time, from a mere point of sound, to the duration of our most passionate interjections. He has a perfect command over all the intervals of the scale, both ascending and descending, and in the discrete as well as the concrete pitch. His simple concrete exhibits the most beautiful structure of the radical and vanish. He performs the wave in its equal and unequal, its direct and inverted forms, through all intervals: but I can not say that he uses its double movement. He exhibits all the modes of stress on the concrete, which belong to the human voice. Its compound species which constitutes the proper vocal shake, he has in great perfection. It is the diatonic shake, the semitonic not being found in his song, nor, as far as I know, in that of any other bird. He makes great use of the tremor, both in a continued line of pitch, and in every diverse movement through the scale. His tremor has not the chromatic character, as far as I recollect it; for my observation of the bird has been transient, and never with a view to the present record. Some other birds have a tremor of a plaintive expression. The structure of his song is that of chirp, phrase,



is excluded from its signs. Some of the conditions and sentiments requiring a feeble voice, are humility, modesty, shame, doubt, irresolution, apathy, fatigue, caution and tranquillity. These generally employ the simple diatonic melody: but there are some emotions, which together with feebleness, use the semitone, and the wave of the second. Of this kind are grief, pity and awe.

*Loudness of voice.* This element as the reverse of the last, is appropriated to states of mind which are associated with muscular energy, and vivid degrees of passion. There are a great many sentiments signified by this symbol; for besides those which employ it as a leading characteristic, such as rage, wrath, danger and horror, there are some that depend, for their

and melody. His melody however is very short: the apparent continuity of its powerful and rapid evolutions consisting of an endless permutation of chirps and short phrases; for I have not been able to perceive any formal order in their successions.

It may thus be seen that the vocal elements of the Mocking-bird, like those of the human organs, are few in number; but in each case our ignorance of their analysis has created a belief that they are infinite. The union of their combinable forms makes them appear more numerous than they are: thus a certain quality or interval, may be heard in succession under every variety of time; and the same concrete, or tremor or shake is heard upon one breath, in several different qualities, and in as many different places of pitch.

The doctrine of the signs of the passions in speech, is strictly applicable to the voices of inferior animals, as regards those sounds which are purely vocal and separate from words. Thus the repeated chirp, which seems to be the idle and unmeaning voice of birds, is generally a short quantity, upon a single rising or falling concrete second, and rarely, as far as I have observed, on the wider intervals. A prolongation of the chirp is usually expressive of their passions and appetites. Pain, love, and fear, are always exhibited in the movement of the semitone.—But I am agreeably led on towards an arrangement, when I designed only to suggest the scheme to others.

The subject is at least curious, if not useful. But it lies out of my way. There are in all sciences large volumes of compilation; let us have from some naturalist with a good ear, a little book of original truth on the matter here proposed. Let it be done by pure and persevering observation. Let the author not lose his strong breath of usefulness and fame, by a puerile precipitancy after reputation; nor hasten with his unripeness, in the market-like fear of being forestalled. Patient and enthusiastic study, independent observation and thought, and a disinterested love of truth, with their sure and great results in science, are always solitary in an age, and can not therefore be forestalled:—and on this point, as in promises of another kind to man, it will be with those who seek the eternal truths of knowledge, that 'the Last shall be First.'

expression chiefly on intonation or stress, which do at the same time assume the character of loudness. Of this class are astonishment, exultation and laughter.

*Quickness of Voice.* In as much as quickness of the current melody generally goes with a Short Quantity in individual syllables, I shall not make separate heads for these two subjects. Some of the states of mind that fall under this division, are likewise expressed by other symbols, particularly by that of Loudness, last mentioned; as rage, wrath, mirth, raillery and impatience. It also happens that many of the sentiments which have their principal signs in forms of intonation and stress, are associated also with quickness of voice.

*Slowness of Voice.* A Slow time of discourse, if not made by Long quantities on single syllables, would be offensive from its pauses. These two forms of time therefore necessarily involve each other. Slowness of time and long quantity are generally joined with the element of the wave; since the return or contrary flexure of intervals is one of the means for producing an extension of time without destroying the nature of the equable concrete of speech. They are an essential cause of dignified utterance, and are therefore always united with those intonations which bear this expression: Slowness of time, with its constituent long quantity, is used as the symbol of many emotions or passions; among which may be enumerated sorrow, grief, respect, veneration, dignity, apathy, contrition, and all other sentiments that embrace the idea of deliberation.

*Quality of Voice.* I have more than once spoken of the Quality or kind of voice. I need not here repeat all the terms by which its species are commonly noted. But the following are some of them, with the passions annexed. Harshness is affected by anger and imperative authority: softness by grief, modesty and commiseration: the whisper, which is a kind of voice, by secrecy. The falsette is heard in the whine of peevishness; in the high tremulous pitch of mirth; and in the piercing scream of terror. The full body of the orotund, in a cultivated speaker, gives satisfactory expression to all those sentiments which are grounded in solemnity and grandeur.

*The Semitone.* The simple rise of the semitone is rather an unfrequent element of expression; since most of those passions which call for its plaintive intonation, and there are many

of this kind, require a long quantity, and consequently are properly expanded into the wave of this interval. Still complaint, grief, and the other emotions of like import, may sometimes be made with an earnestness or spirit which requires a short syllabic time. In this case the voice can not bear the delay of the wave, and effects all the purposes of the semitonic intonation by the simple rise or fall through the concrete, with the addition, when necessary, of the radical or vanishing stress.

*The Second or Tone.* All those states of mind which accompany what may be called mere thought, in contradistinction to passion : all those narratives or descriptions which represent things as they are in themselves, without reference to our relationships to them, on the point of pleasure or pain, desire or aversion, interest or injury—these are all represented by the plain unobtrusive interval of the second.

The other elements of expression have something striking in their character which the attentive student may easily recognize. When, therefore, none of these are obvious, he may conclude that the current of speech is in the diatonic melody ; that is, the syllabic utterance, is through the rise or fall, and the radical change of a tone.

*The Rising Third, Fifth and Octave.* I have thrown these intervals into the same class because they are generally used to express different degrees of a passion. They represent, according to the extent of the interval employed, interrogation under the different features of dignity and of earnestness. They mark admiration, and hence are frequently used as means for emphatic distinction. When united with aspiration they do the part of the downward intervals of the scale, and indicate surprise and its congenial emotions. They express a conditional sense when used on emphatic words. The octave has the power of raillery, of quaintness and of mockery. When the guttural emphasis is united with these intervals, particularly the higher, it adds scorn to a question ; and joins to their character in emphasis, the sentiments of haughtiness, disdain, indignation, contempt and scorn. The deliberate execution of these high intervals requires long quantity in syllables : but in their simple rise, they have not that protracted duration, and consequently that solemn and dignified character which belongs to them when doubled into the form of the wave.

The rising Minor Third has the general character of the expression of the semitone. But it seems to be less adapted to Speech, except where the emphasis calls for something of the cry.

*The Downward Third, Fifth and Octave.* In general description, we may say these intervals severally express different degrees of the same sentiments. They are emphatically appropriated as the signs of surprise, astonishment, wonder and amazement; and though the terms of these emotions, are by no means synonymous, still the emotions themselves are each and all effectually represented by any one of the above named intervals. The designation of the specific difference being made by the conventional meaning of the words on which the element is employed, and not by any power of intonation; for this, by the condition of the cases here considered, is identical in each instance. These downward intervals denote a positiveness of mind; and a settled conviction on the part of the speaker: hence they are given to phrases significative of authority, command, confidence, and satisfaction.—A downward movement is, as we have seen, the symbol of a pause in the sense, at the place of a cadence: and consequently is well suited to express those sentiments which have some affinity with that state of repose; such as resignation, despair, and the condition of mind that attends fatigue. What was said of the rising minor third, is applicable to its use in a downward direction.

*The Wave of the Semitone.* I spoke of the simple rise and fall of the semitone; but its return or contrary flexure into the wave, is by far the most common form of this expressive element. Indeed I do not know a symbol of speech which represents so many and such various emotions: the specific distinction of the cases depending on the phraseology or term in which the emotion is conveyed. The wave of the semitone differs from the simple interval, in the dignity of the expression derived from its extended quantity: and in its enhanced degree, from the repetition of the element in a contrary direction. Sorrow, grief, vexation, chagrin, repining, contrition, impatience, peevishness, compassion, mercy, commiseration, condolence, pity, love, fondness, supplication, fatigue, and pain—with all the differences which may exist between them,



are still expressed by this intonation of the wave of the semitone.

*The Wave of the Second.* The interval of the second, whether in a rising or falling direction, being the symbol selected by nature for plain unimpassioned discourse, we can not properly call it an element of expression. But as the downward return of this element into the form of the wave, produces a long quantity, it necessarily adds to the second the peculiar effect of that quantity. It is this element, when extremely protracted, that gives to discourse a full character of dignity, solemnity and grandeur, without infecting it with the vivid coloring which belongs to the other accidents of quality, abruptness and force, and to the wider intervals of intonation.

*The Waves of the Third, Fifth and Octave.* The forms of the wave are so various, that it would far exceed the elementary purpose of this work to attempt to enumerate them, and to assort them with the passions. I sufficiently unfolded, in a former section, the principles on which their expressions depend. The character of the above-named intervals in their simple form, has a large influence in determining the expression of the wave. The upward vanish of the last constituent of the inverted forms has the force of interrogation; and the downward course of the last constituent of the direct, carries the expression of surprise. If then the wave has the same character as the simple element, without the conjunction of the previous rise or fall, what need is there of its existence?

——It affords the means of giving long quantity to syllables, and consequently of expressing the designed emotions with dignity. In the double form, the wave denotes sneer, mockery, petulance, contempt and scorn: but these two last are more conspicuously exhibited by conjoining an aspiration with the wave.

The wave of the minor third is only a more impressive form of that character which belongs to its rising and falling constituents; and like them, it has no place but as an occasional emphasis in the chromatic melody.

*The Radical Stress.* From what was formerly said of this element, we know it to be the means for adding increased degrees of impressiveness to all the other symbols of the passions which are capable of receiving it. Though it is more particu-

larly employed on immutable syllables, yet when a discourse is in quick time, it is the mode of stress even on those of indefinite quantity. Anger, wrath, rage, impatience and mirth, are generally uttered with haste, and therefore take on this mode of stress, in emphatic places. It is employed on the imperative words of authority ; for it has among the modes of stress, a degree of positiveness similar to that which is expressed by the downward intervals, among the modes of intonation.

*The Median Stress.* The radical stress was shown to be the means for enforcing the sentiments which employ short syllables. The median stress is the mode of enhancing the power of those which demand a long quantity, together with a smooth utterance. I speak of the qualification of smoothness, since long quantities do sometimes for particular purposes take on the abrupt opening of the radical, or the final jerk, if I may so call it, of the vanishing stress. The states of mind which call for the median force, are those represented by the waves of the various intervals ; particularly the dignity of the wave of the second, and the plaintiveness of that of the semitone. Of these kinds are awe, respect, deliberation, solemnity, supplication, and reverential submission. It is likewise to be remembered that this median stress may be executed on a simple rise or fall, when it is unusually prolonged ; thus the downward vanish of surprise may sometimes be invested with this mode of force.

*The Vanishing Stress.* So much was said of this stress in a former section, and its expression was so particularly noticed, that it is unnecessary to repeat the detail here. It is a mode of force far inferior, in point of dignity, to the last mentioned element ; but it is sometimes highly effective on those words which carry the passions, represented by the semitone and higher intervals, such as grief, surprise and interrogation: for by impressing the extremes of these intervals on the ear, it points out their several ranges more distinctly than they are marked by the natural vanish.

*The Compound Stress.* I said formerly that this Compound stress is scarcely distinguishable from the thorough stress and the loud concrete. These three subjects may therefore be embraced under the present head. They are indeed

separate functions of the voice ; but in reference to any practical application, it is unnecessary to allot different expressions to them. When set on immutable syllables they are identical in effect, with the radical and the vanishing stresses ; nor does their expression differ greatly from that of these elements, even when heard on longer quantities. Whenever the compound stress is clearly made out, which may be the case on syllables unusually protracted, the expression will be more notable than that of either of its two constituent stresses. The three modes of force which are here classed together may be considered as the proper symbols of energy or violence of passion.

*The Tremor of the Second and of higher Intervals.* The tremulous movement, when applied to the intervals here named, serves to designate a number of sentiments considerably different from each other. And here again we have an instance of a principle extensively operative in the expression of the passions : for these sentiments, though set within the same general-frame of intonation, have their specific divisions marked by the conventional terms which describe them. The tremor of the second and of higher intervals is shown in the expression of exultation, mirth, pride, haughtiness, sneer, derision and contempt ; and in effecting these expressions, the elements may move through the simple rise or fall, or through the wave.

*The Tremor of the Semitone.* The tremulous movement through the semitone on a tonic element, is the crying-voice. When therefore it is used in syllabic intonation, it gives a sign of deeper distress to the sentiments which are associated with the simple semitone. These have already been enumerated, and need not now be repeated. All of them embrace a greater or less degree of the condition of suffering ; and though they may differ as widely as the several emotions of grief, tenderness and supplication, each of which carries the semitone, yet when they are highly strained or become excessive, they naturally and alike fall into the tremulous intonation.

*The Aspiration.* The reduction of the pure quality of the tonics and subtonics by a commixture with the aspirated element, produces a symbol of many and differing states of mind. It always accompanies the force of vociferations ; and is the

faint sign of secrecy. It is joined with the loud utterance of all energetic sentiments, when they are not strained into the falsette. It also indicates the emotion of earnestness, curiosity, surprise, and horror. I did, on a former occasion, assign the expression of contempt, sneer and scorn to the wave, particularly in its unequal form. But even this does not carry the full measure of these passions, if an aspiration is not mingled with the intonation: and it is still further to be remarked, that when the aspiration is joined with any form of the wave, and with any of the simple upward or downward intervals, it communicates to them the power of representing these last named passions.

*The Guttural Emphasis.* This is a harsh element, and therefore belongs to all those states of mind which are classed under ill-humour; including dissatisfaction, peevishness and discontent. But it likewise appears in the strained ferocity of rage and revenge, and is the common sign of shaming rebuke. It also has an import of sneer, contempt and scorn.

*Of the Emphatic Vocale.* This is purely an element of force, and in the particular words which admit of it, is the sign of anger and rage, and of vehemence in any passion. It is however of rare occurrence; and being almost needless in cultivated elocution, ought perhaps to be even more rare than it is.

*The Broken Melody.* The current melody has been represented as a succession of intonations, employing every species of interval both in concrete and in radical pitch; and intersected by pauses, applied as often as the sense, or a call for vivid delineation may require. But there are particular states of mind which over-rule the occasions, and grammatical proprieties of pausing, thereby producing notable rests after very short phrases, and even after every word of a sentence, without reference to the connexions of syntax. I use the term Broken Melody, to signify those interruptions in utterance, which the excess of certain passions sometimes creates.

The nature of this function will be best explained by giving the physiological analysis of it.

In the section on the mechanism of the voice, I spoke of two modes of expiration under which speech might be made: one resembling an act of sighing, by which all the breath is



sent forth in a simple impulse of short duration, and within which, scarcely more than one or two words can be uttered with ease. The other mode of expiration is used in common speech. Within it, we are able to utter whole sentences, by a frugal use of the breath, in giving out small portions at a time, for the successive syllables. Since the former of these modes, seems to draw off all the contents of the lungs, if I may so speak, it might be called the *Exhausting breath* : and the latter from its being held back to be dealt out as the syllables require it, may be called, for the want of a better name, the *Holding breath*.

I said formerly in treating of the orotund voice, that an infant begins to speak in the exhausting mode. It occurs likewise when one is 'out of breath,' from exercise ; and in the extreme debility of disease. Hence in these cases, there is often not more than one syllable heard in a single act of expiration. The breath on which the tremulous movement of laughter and crying is executed, is of this kind. I know the tremor makes a slight difference here : but if the reader will for a moment make the experiment, he will quickly feel that he laughs and cries himself, if I may so speak, to the bottom of his breath ; and that he can not without an inhaling pause, continue the tremulous function, for that prolonged period, through which he is able to carry common speech.

This state of the respiratory organs which occurs in the exhausting breath, is produced by a high degree of certain feelings. Thus the operation of deep distress involuntarily creates this kind of expiration, in the form of a sigh. Now when we are under the influence of bodily pain or mental suffering the words which come forth, are borne upon the exhausting breath ; which allows but one, or at most two or three words to a single act of expiration : and thus by the intersections of repeated pauses, the *Broken melody* is produced. It will be the same, if an excess of feeling should blend the tremor of laughter or crying with discourse : for by the above described nature of these functions, the melody must be interrupted by the frequent necessity of inhaling. It may be asked—why the breath may not be rapidly recovered, as it is in the momentary stops of discourse, which are sometimes scarcely perceptible. The reason is this : In the holding expiration of

common speech, the respiratory function does not discharge the whole of the air from the lungs; such a quantity only is gradually spent in the utterance of words, as may be restored by a quick act of inspiration. But in the process of speaking by the exhausting breath, there is an expulsion of nearly all the air which can be discharged by an extreme contraction of the chest, and the subsequent repletion of the lungs requires a degree of expansion and a depth of draught, which occupy the time of the protracted pauses of the Broken melody.

It is not necessary to speak of the phrases of intonation, which are used in the melody here considered. Every species may be employed; though, from the many interruptions of the current course, the relationships of the phrases are not so perceptible nor so important in practical effect, as in the more connected sequences of a common melody.

I have thus endeavoured to open the way for a future description of the various elements of passionate utterance, and a systematic arrangement of them. I have regarded them in an insulated light, though not one is ever heard alone; and in some instances many are combined in a single act of expression. Indeed, if after this elementary representation, the practical uses of the voice be considered, it will be found that these elements are employed under all modes of union which do not imply a contradiction. Thus a feeble and a forcible sound can not exist in the same impulse of utterance; but either of these conditions may be conjoined with any of the affections of pitch or quality or time. No one interval of pitch can, during the same syllabic impulse, be any other interval; but any movement of pitch, may as occasions require, be made simultaneous in execution with any quality or time or stress. So in the way, the intervals of pitch may be consecutive in all possible ways; and these ways whether in interval or arrangement, may be conjoined with all the accidents of the voice, not at variance with their definition.

It is then by the use of the few elements which have been enumerated, that the apparently infinite effects of speech are produced. But the preceding analysis of their vocal functions, and the reduction of their nomenclature to the terms of the above named elements, must at once seem to put the inquirer in possession of the means for surveying the whole extent of this

supposed infinity ; and by causing him to think he sees the very number of the possible combinations, to change his vulgar wonder over obscurity, into an intelligent admiration at the comprehensive but still measurable constructive-powers of a few associable constituents.

The reader may now see why I have limited the range of this work to the consideration of elements, in their separate state ; or have only regarded a few of their combinations. To give a full detail of every possible group of the elements of vocal expression, would be beyond my design in setting forth the broad Philosophy of this subject. Nor indeed would it be necessary in a practical point of view ; for if the practice is analytical over the speech of another, the duty in this case is, to resolve the combination into its parts. And if, on the other hand, one should be desirous of forming combinations to express certain states of mind, he can never be at a loss, after a proper description of the power of all the individual functions, to join those which are necessary for the full expression of his emotion or thought.

From a review of the elements, and a reference to the vast variety of mental affections to be represented in speech, we must be struck with the disproportion between their respective numbers. Some of the passions, are expressed by the same mode of intonation : but there are other conditions of mind, which as far as I know, have no particular symbols among the elements. These must be described by an arbitrary language. Thus a person may on a mere tonic element which in itself conveys no idea, represent his grief or pain, by simply carrying that element through the interval of a semitone : or he may mark an inquiry by its movement through the concrete fifth : or his anger by its abrupt explosion. But there is no element by which he can inform us of his vanity, his fortitude, his remorse or his generosity : these must be shown in action, or, be described by words. There are indeed resources enough in the combinations of the elements for these purposes, but the associations have not been made in the instinctive ordinations of expression.

## SECTION XLVIII.

*Of the Mode of Instruction in Elocution.*

I HAVE thus far set before the eye of philosophy a copy of the designs of nature, in the construction of human speech. It is necessary, if I may still carry on the figure, to furnish at the same time a 'working plan,' to him who may wish to build up for himself a fame in Elocution.

If the reader is one of those who from disappointment in higher hopes, have at last resolved to receive their station in life, through the suffrages of ignorance, and who in their accomplishments are careless of rising above the discernment of their constituents, let him pass by this section. A little will serve his purposes; and the instinct of his ambition, without the wise designs of human assiduity, will enable him to be easily the file leader of his herd. But if he believes in that fine induction of the Greeks, that 'good things are difficult;' if he sees the successful pretender, still restless and dissatisfied, in having made captives only of the ignorant; if he desires to work for high and hard masters, and to take his ultimate repose by the side of their ever-during approbation, he may receive from the following pages, some assistance towards the execution of a design to acquire the art of reading well.

Can Elocution be taught? This question has heretofore been asked through ignorance. It shall hereafter be asked only through folly.

The sceptics on the subject of the practicability of teaching elocution, appear under three classes. The one is a simple sort, who knowing that the ways of the voice have never been traced, believe they never can be reduced to assignable conditions. This opinion is grounded on the idea that the expressive effects of speech consist in an occult something which can not be discovered, but which is neither high nor low, loud nor soft; in short is not any of the known accidents of sound.



They who thus confuse the plain revelation of nature, seem to have just such an idea of vocal expression as school-girls have of the expression of the countenance,—That it is not a palpable effect of the physical form of the face in its state of rest, and in its various motions, but a kind of immaterialism, which darts from the eye, and breathes from the lips : a ‘soul,’ as it were in the face, which is yet ‘neither shape nor feature.’

The scepticism of the second class savors of something rather worse than simpleness. It promulgates the idea, that accomplishments in elocution are the result of certain indescribable powers of genius, and that the happy possessor of them is the production of one of nature’s rare ‘moments of enthusiasm.’ Such sleight of tongue, to hide the plain agency of natural causes, is not only heard from those who are vain of common-place endowments, but is not disdained by some who possess attributes sufficient to set them far above all stale-grown tricks for reputation. He who has great powers in an art, knows well that he is distinguished from the thousands that surround him, by his industry, and his singleness in purpose and zeal : nor does he withhold instruction, in the fear of creating rivals, since he persuades himself that, if it is necessary afterwards, he can always excel them.

Those who constitute the third class are too intelligent to believe in this mystical doctrine of the inspiration of genius ; yet they hold that the art of reading well can be taught only by imitation. It is true, elocution has furnished instances of great ends being attained, without a knowledge of all the nicety of means ; and this may prove that it is less important and practical to direct another what he should do, than to give him an example of it. But the analysis which has been made, will now enable a teacher to give the memorable description of what is to be done ; and thereby to furnish the pupil with comprehensive purposes, as well as with the transient benefit of example.

I have thus named the objections, sometimes made against an attempt to teach the uses of the voice, by systematic and communicable principles. I shall not confer importance on them by refutation. In so doing I should only record some vain opinions of this age, which a future one need not know. At the present time I am quite unconcerned whether the offered ana-

lysis in this essay, and the scheme of instruction founded upon it, is to the old school of mystagogues and imitators, either ‘a stumbling-block or foolishness.’

The preceding history will furnish most of the materials for erecting elocution into a science : and we must wait for the nice observations, comparisons, and conclusions of taste, to frame a body of rules for directing the best use of these materials. Our analysis will not only afford the means of reducing the vague and arbitrary fashion of the voice to that standard of general principles, to which the fine arts may be brought : but it opens a new field on the subject of instruction. All arts which have been separated into their elements, have been re-composed into grammatical schemes for teaching by those elements : and it now becomes us to try what may be the advantages, as to economy of time, and precision of execution, from following an elementary plan, in communicating a knowledge of the nature and uses of human speech.

Language was long ago analyzed into its alphabetic elements. Wherever this analysis is known, the art of teaching language, has, with the best success, been conducted upon the rudimental method. Now, I know that if other accidents of speech, besides that of pronunciation, be taught by this manner of resolution, the benefits of instruction will be in no less a degree attained, than by the mode of alphabetic analysis. If we teach a child in this way, in order to make him acquainted with the simple sounds of speech, and to give him a facility in the pronunciation of them ; what reason can be suggested why a clear perception of the varieties of stress, of time and of intonation, and a facility in managing them in current utterance should not be acquired in a similar elementary manner.

The art of reading consists in having all the vocal elements under complete command, that they may be properly applied, for the vivid and elegant delineation of the sense and sentiment of discourse. I pass by in this section, all notice of the elements as expressive of feelings or thoughts : and shall here consider only the means of furnishing the material of speech whenever the mind may require its use.

If I were a teacher of elocution, I would form into a didactic system, the mode of practice by which the analysis contained in this work was accomplished ; and would assign to my pupil a task under the following heads.

*Of Practice on the Alphabetic Elements.* Notwithstanding we are all taught the alphabet, we are not taught the true elements of speech: I would therefore require the pupil to exercise his voice on the real constituents, as they are sounded in a strict analysis of words. In the present school-system of the alphabet, it is true, all the vowels and one of the consonants are named as they are pronounced in combination: but in that system many vowels have no peculiar symbol, and nearly all the consonants are heard as syllables, not as elements. If ‘*b*’ and ‘*k*’ and ‘*l*,’ (and what I say now will apply to all the consonants,) be sounded as respectively heard in ‘*b*-ay’ and ‘*k*-ing’ and ‘*l*-ove,’ that is, if we pause after these several initial elements have escaped the organs, we shall have the real elemental constituents of the syllables, instead of the compounds ‘*be*,’ ‘*kay*’ and ‘*ell*’ as they are universally taught.

I would have the first lesson then to consist of the thirty-five elements, in order to ensure a true and easy execution of their unmixed sounds. It may be asked,——whether a careful pronunciation of words in which these elements, though combined, must still be heard, would not give the required exactness and facility? I believe it would not. When the elements are pronounced singly, they may receive a concentration of the organic effort, which gives them a clearness of sound and a definite outline, if I may so speak, at their extremes, that makes a fine preparative for a distinct and forcible pronunciation in the compounds of speech. I venture to assert that no one who has neglected this mode of alphabetic practice, is able to give the guttural murmur of ‘*b*,’ ‘*d*’ and ‘*g*,’ with that force and fulness, and duration, which are required on occasions that call for the higher graces and more striking expressions of elocution.

But there is one element, which may, by separate utterance, be improved to a degree that can not be reached in the conjoined mode of pronunciation. I mean the sound of ‘*r*.’

The element ‘*r*’ is a modification of the vocality of the sub-tonics; and denotes two different articulations. One is made by a simple contact of the tongue with the roof of the mouth; the other by its quick percussion against that part. The ‘*r*’ produced by the first organic combination, differs very little



from the short tonic 'e-rr,' and is called the smooth 'r.' That formed by the percussion may be called the Vibrant 'r.' It has a distinctness of character and a body of sound, not possessed by the other : and if my metaphor could be appreciated, I would say, the parts concerned in its formation, seem to have a firmer grasp of the breath. But it must be borne in mind that this Vibrant 'r,' even with its vigor and satisfactory fulness, will be agreeable only when it consists of one, or at most, two or three strokes and rebounds of the tongue : for if it should become a continued vibration, the effect will be offensively harsh, except it be expressly designed for a rough or energetic utterance. The perfect 'r' for the purposes of distinct and impressive speech should consist of a single slap and retraction. It *can* be made in this manner : but it must be done through long trial, on the solitary element.

Besides the difficulty of acquiring strength and accuracy in this separate pronunciation, there are combinations of the 'r' with other elements, which can be effected in an agreeable manner, only after long practice. It is obvious, that the sub-tonics and atonics, which employ the tongue, will not readily unite with an element, requiring a quick remove of that member to another part of the mouth, even when the 'r' is produced by the simple pressure of the tongue. But the difficulty of transition is much increased, by the velocity necessary for the Vibrant 'r.' Let us, for instance, suppose a syllabic step from 'd' to 'r,' as in the word 'dread.' Now, as the formation of 'd,' requires the tip of the tongue to be applied to the upper fore-teeth, if the 'r' is taken smoothly, the union of these contiguous elements may be made without much effort, by retracting the tongue to its place for forming the 'r.' But if we wish to roughen the word by the Vibrant 'r,' the tongue is to be removed from the teeth, and to be brought down towards its bed, in a kind of drawing-off, for the purpose of making a sudden impulse against the roof of the mouth : and it requires both exertion and skill, to accomplish these successive movements with the quick coalescence which syllabic utterance requires.

There is also considerable difficulty in the attempt to unite the Vibrant 'r' with some of the tonics ; and the cause is analogous to that which is operative in the above described combination.



When the Vibrant 'r' is set before the tonics, the coalescence is easy, but it is not so when it follows certain of these elements. If the tonics are of long quantity, there is only the slightest difficulty ; as in 'glare,' 'war,' 'far,' 'peer,' 'mire,' 'our,' 'your.' But if the natural short-tonics 'e-rr,' 'e-nd,' and 'i-n,' and most of the other tonics, when pronounced short, precede the Vibrant 'r,' there is not only a considerable hiatus, but a change of the elemental sound takes place ; and that peculiar aspirated utterance is heard, which forms one of the characteristics of speech in the natives of Ireland. This will be perceived upon pronouncing the following words with the Vibrant 'r': *interpreter, world, irritate, intercourse.* The cause of the difficulty, and of the change of sound, will appear in the following explanation.

The tonic sounds, though in greater part laryngeal, are, in some cases, modified by the agency of the tongue and lips. If their formation be observed with respect to the first of these organs, it will be seen that they employ it in varying positions, from the deepest depression in its bed, till nearly in contact with the roof of the mouth. The place of the tongue in the utterance of 'a-we' is the lowest : and in 'ee-l,' 'e-nd' and 'i-n,' it is the highest. Now, if the tongue be depressed whilst the effort in these three last instances is going on, it will be perceived that the short tonic sound is corrupted into a semi-aspiration. When 'a-we' precedes the Vibrant 'r,' the tongue is in a proper position to make its percussive impulse : and the combination is both easy of execution and agreeable in effect.

If a short tonic element is followed by 'r,' it is necessary to depress the tongue, to give it some swinging-way, if I may so speak, for the purpose of gaining the velocity of percussion : and the aim to effect this in the quickest time, produces the strained effort of pronunciation. But with every endeavour, there is still a perceptible interval between the change from the lowest position of the tongue to that of its contact with the roof of the mouth. And as there is no call to arrest the vocality during this time of the change, the depression of the tongue, for effecting the percussion of the 'r,' converts that vocality into a partial aspiration, agreeably to what was said above. This mingling of aspiration with the sound of the short tonic, and of the 'r,' produces the disagreeable effect perceived in the utterance of these conjoined elements.

The difficulty of executing the 'r,' under the circumstances above-mentioned, will, I fear, be insurmountable to those who are not persuaded, that the perfection of all their accomplishments must at last be measured by their ingenuity in the contrivances of trial, and the enterprises of their unwearied practice. Those who know that fruitful ambition is the growth of wise docility of mind, and heartfelt resolution, have only to learn that it is within the capabilities of time and exertion. How long it may take to overcome the difficulties here alluded to, must depend on natural facility of organ: nor need it be told to those who deserve instruction, and will have success. To such spirits, it is enough that it may be done.

An exact pronunciation of the elements according to the standard of the day, is not a matter of importance merely as regards formality of fashion, or even beauty of effect; it has a claim of greater dignity.

When ideas are to be communicated with precision and strength, it should be by well-known words. They should not be peculiar or striking by length, nor by hiatus of utterance. There should be no remarkable contrast between them; no attractive similarity in their sound; nor indeed any thing in the language which might allure attention from the idea conveyed by it. A writer who frequently employs uncommon words, never has vividness or strength of style. To ensure the utmost perfection of these qualities, sounds should slip into the mind, if I may say it, without the notice of the ear. Now what is here said on the distractions produced by the novelty of words, applies equally to the pronunciation of the alphabetic elements; for the least deviation from the assumed standard converts the listener into the critic: and I am surely speaking within bounds when I say, that for every mis-called element in discourse, ten succeeding words are lost to the greater part of an audience.

I have therefore recommended a long continued practice on the separate elements, with a view to acquire that command which will not only contribute to the elegance of speech, but at the same time may help to remove all obscurity from the oral picture of sense and passion.

*Of Practice on the Time of Elements.* I have said enough in former pages on the necessity of a full command

over the time of utterance, in order to effect the high purposes of elocution.

When the true pronunciation of the elements is acquired, the pupil should not, according to the usage of the primer, pass at once to their combinations. They are employed in speech under different degrees of duration : and an exercise of the voice, through all the modes of quantity, upon individual elements, is on this subject, equally with that of the last head, productive of a skilful management, which can not be so well or so easily effected, by practice on the common current of discourse. Let the pupil then consider the alphabetic elements as a kind of gamut, on which he is to learn not only the names of the notes, but all their varieties of time. The power of giving well measured length to syllables is so rare among speakers, and so difficult to acquire, that I thought it proper to draw attention to this elementary mode for facilitating the attainment of it.

The prolongation of the atonics is of little consequence. But let the student reiterate his practice on the tonics and sub-tonics, until he finds himself possessed of such a command over them, that he may, at will, give any required quantity to their syllabic combinations.

It may be particularly remarked that the elements, ‘*b*,’ ‘*d*’ and ‘*g*,’ admit of a slight degree of quantity, through the prolongation of their guttural murmur : but a strenuous practice is necessary to render it applicable to the purposes of oratorical time.

When ‘*r*,’ is to be prolonged, and the rapid iteration would be inappropriate, the smooth, and feebly-formed element is to be employed ; since the perfect percussive ‘*r*,’ made by a single stroke and rebound of the tongue, is necessarily short.

The element ‘*s*,’ when alone and prolonged, is a sign of contempt. In syllabic combination it is offensive when much extended in quantity. If made in its shortest time it does its part as an element, and loses much of the character of the hiss. Let the pupil therefore practise the shortest quantity on this element, by abruptly terminating the breath, or by separating the teeth at the moment its sound is heard ; for this at once cuts it short.

*Of Practice on the Vanishing Movement.* The con-



sideration of this point should have been united with the last. For if an attempt to prolong the elements be made without reference to the equable concrete of speech, it will be very apt to run into the note of song. The difference between these two modes of intonation is readily perceptible to a musical and attentive ear, even when made upon a single tonic, by a comparison of their respective effects with the well known impressions of current speech and of song. Let each individual act of intonation be assumed as the beginning of a series: if it be the equable concrete, it will not seem to be the opening of a song. The pupil then without confusing his ear by other particulars, should exercise himself in the natural radical and vanish, on all the extendible elements. An unerring power of execution in this function, however long the quantity may be, will always ensure to speech, an entire exemption from the characteristic of song.

In this elementary intonation of the equable concrete, particular attention should be paid to the structure of the vanish. The pupil must therefore endeavour to give it that delicate expiration which may render its limit almost imperceptible. We often lean the ear in delight, if I may say so, over this smooth knitting of sound with silence, by singers: and the master in elocution shall hereafter know, that one of those graces of speech which he could never name, and thought 'beyond the reach of art,' consists in that attenuation and close of the syllabic impulse which are here recommended as a lesson for a school boy.

*Of Practice on Force.* It is scarcely necessary to say how loudness or strength of voice is to be acquired. It is not essential in discipline that the elements should be uttered separately with regard to force: since after the other accidents are brought under command, the exercise on loudness may be effected during the current of discourse. Still I believe the ends of instruction would be somewhat easier attained by the elementary process in this particular. Few persons are aware of the influence that loud speaking or vociferation has on the quality of the voice. I have before said that it is one of the artificial modes of producing the orotund. It takes the voice from its meagre mincing about the lips, and transfers it, at least in semblance, to the back of the mouth or to the throat.



It imparts a grave fulness to its quality; and by creating a strength of organ, gives confidence to the speaker in his more forcible efforts, and an unhesitating facility in all the moderate exertions of speech.

*Of Practice on Stress.* Though the mode of elementary exercise on loudness may not be required, I must urge its importance, upon the subject of stress. There is a nicety of analysis in this matter, which will be definitely recognized, and consequently can become familiar, only through the deliberate practice and unembarrassed observation, afforded by trials on the separate elements.

It was said formerly that the radical stress is made with emphatic strength only on the tonics; still an attempt to perform this function on the subtonics is not to be entirely neglected. The full power of the radical abruptness is obtained by opening the elements into utterance by a sort of coughing explosion.

For the median stress or swell, no particular direction is required. It is generally employed on the wave, and is therefore connected with the practice on pitch.

The vanishing stress may be practised by assuming in speech something like the effort of hiccough, for the wider intervals of the scale; and something like sobbing, for the minor third and the semitone.

It is not necessary to speak of exercising the voice on the compound stress, the thorough stress, and the loud concrete. These are, indeed, philosophic points, but they are of little importance in a practical view.

*Of Practice on Pitch.* The scale of pitch which is used in this essay, is that long ago formed and named in music. It was described in the first section. The order of its proximate intervals and the span of its wider transitions, must be learned from an instrument or the voice. With a few days attention to the effect of the various rising and falling movements on the keys of a piano-forte, a pupil who has the least musical ear, will be able to execute the same successions in his voice, and thus to recognize the concrete pitch and the change of the radical, when they are made on elemental or syllabic utterance.

When the pupil has passed this preliminary step, I would

have every interval of pitch, both in an upward and downward direction, and in concrete movement and radical change, practised on every tonic and subtonic element.

The semitone is easily taught, and the scholar may always hit its interval by affecting a plaintive utterance. Let him devote some time to putting it through all the elements, and he will thereby render it readily obedient to the sentiments which require its expression.

I must negatively describe the effect of the simple and uncolored interval of the second, by saying,—it is not the semitone, with the plaintive character of which we may now suppose ourselves well acquainted ;—nor is it the third or fifth or octave, also well known as the sign of interrogation ;—nor the wide downward movement of surprise. If then in syllabic utterance, we produce none of these effects, we may be sure we have gone through the simple second of the plain diatonic melody. Let the pupil practise this interval on all the tonics and subtonics, and he will be able always to command the constituent of this plain melody ; nor will he be in danger of infecting its appropriate character by the whine of the semitone, the sharp inquisitiveness of the fifth and octave, or with the more offensive affectation of the higher forms of the wave.

That the pupil may ascertain when he is executing a downward interval, let him familiarize his ear to the effect of the last constituent of a cadence, consisting of a gradual descent upon three distinct syllables. This will give him the character of the falling second : and if he studiously repeats the elements with a reference to this movement, he can create nearly as clear a perception of the peculiarity of the interval, as he has of the sounds of the elements themselves. When he has prepared himself with this downward vanish, he may contrast it with the rising second, and he will thus soon become acquainted with the audible character of each. Upon knowing the second, the wider falling intervals may be easily recognized, by continuing the downward progress, till the intonation assumes the expression of command : the extent of the downward movement through a third or fifth or octave, being proportional to the less or greater degree of that sentiment. When these intervals have become familiar, let them be compared with the higher intervals in a rising direction. The difference

between the intonation of a question and a command, will thus be made manifest.

I would have the pupil, in going through the elements, play upon them in the movement of the wave. His practice here must be governed by his perceptions of the simple intervals which variously compose its different kinds. The wave of the second is of great importance, in the grave and dignified cast of the diatonic melody. I can not by any graphic sign or by direct description bring this function before the reader's attention : but in giving prolonged quantity to indefinite syllables, if the effect of the upward or downward wider intervals is not recognized, —nor the peculiar note of song; —nor the marked impression of the higher waves, —nor that of the plaintive semitone, it may be concluded that the voice is moving in the wave of the second.

*Of Practice on Melody.* One of the most difficult things regarding intonation, is the perception of the radical changes of the second in the progression of the current melody. If the pupil has a musical ear, he may easily acquire the habit of varying the several phrases in the manner formerly mentioned. Should he not have a nice discernment of sound, nor ingenuity in experiment, he must learn the diatonic progression from the voice of a master.

The flow of melody can not be made on single elements, therefore the cultivation of this function must consist of exercise on connected syllables. The best method is to select a portion of discourse, to keep in mind the manner in which it should be naturally read, and yet to pronounce only the tonic element of each syllable. In this case, the ear not being embarrassed by the subtonics, the difference between rise and fall in radical pitch, will be more apparent, and consequently the power of avoiding monotony, and of mingling all the phrases in an agreeable variety, more easily attained.

*Of Practice on the Cadence.* The cadence is an important part of the melody of speech. I shall, in the last section, notice the faults of speakers on this point. I here propose the form of elementary practice ; by which I mean that the pupil should bear in mind the different modes of intonation for terminating a sentence, and should exercise his voice on one, two, or three elements or syllables, considered as a close.

If the application of the various species of the cadence be made with attention to their mode of construction and effect, the command over intonation in this particular, will be more completely acquired than when the aims of the pupil are confused by the ordinary system of imitative discipline. After the proper time has been devoted to the plan here recommended, a speaker will find himself provided with an ample fund for variety in his periods ; nor will he be likely to incur difficulty or awkwardness in the execution of them.

*Of Practice on the Tremor.* The tremulous movement is one of those functions which should be practised on individual elements. With a knowledge of its construction, the scholar may correct himself in his task, and finally acquire that nicety which is essential to this expressive species of intonation.

I know that the habit of laughing and crying does here furnish a wide field of practice ; but it is to be recollected that we laugh and cry, in a natural way for our own delight or relief. When we wish to furnish a picture of the tremulous function to an audience, it should be done, not only according to the sentimental dictates of nature, and within the pale of her truth, but also with that utmost degree of refinement in mode, and beauty in execution, which nature herself may never find purpose enough to accomplish ; though she may be ready to acknowledge their entire consistency with the spirit of her laws.

*Of Practice on Quality of Voice.* The quality of voice, or its particular kind of sound, is capable of improvement ; and the practice in this case may be either on the elements, or on the current of discourse. But as the quality is most perceptible on the tonic sound of a syllable, perhaps the elementary mode is the best plan for instruction. In whichever way the improving exercise is conducted, by it, a harsh quality may be somewhat softened : a husky voice may be brought nearer to pure vocality ; the piercing treble may be reduced in pitch, and the thin and meagre voice endowed with fulness and strength.

There is, however, a deception on this subject, which deserves to be noticed here.

The qualities, or, as they are called, the ‘ tones,’ of the voice, are said to be unlimited, and like the face, peculiar to each in-



dividual. It is true, we do not often confound the several voices of persons whom we have heard, however numerous they may be : but the distinct recognition is here made upon the combination of the elements of force, pitch and time, rather than on the single point of quality. Thus one speaker is characterized by a constant use of the vanishing stress ; another by that of the radical ; one employs the interval of the third in the current melody, instead of the second. Some exhibit a general predominance of long,—others, of short quantities. In fine, by permutations of these features, an almost infinite number of faces, if I may so speak, is given to the body of our speech.

There are as many varieties of quality, as of any one of the accidents, and more than of some : the amount, however, falls far short of the combinations of the several accidents with each other.

We may learn that the quality of a voice is not always its distinguishing mark, by attending to the prolonged note of song ; for it gives quality alone. In forming a judgment from this simple sound, exclusive of any peculiarity of stress or intonation, it is not easy to distinguish voices which would be widely different when heard through a single sentence in speech. From general observation only, I am disposed to believe, that of the speaking voices of a thousand persons, nearly every one would be different, through the varied combination of their constituent elements. But if the same voices were severally designated by a single prolonged note of song, the differences might be reduced to a few classes. There would be harsh and soft voices heard among them, shrill and bass, clear and aspirated, dull and ringing : and to these a few other kinds might be added. Yet even these would, in some cases, be distinguishable only by a cultivated ear ; so that of the whole thousand, above supposed, I doubt if more than twenty points of recognition could be found, to constitute twenty kinds of quality.

Of the *orotund* as a kind of voice, I spoke in a former section ; and described there, the mode of managing respiration, by which the fulness, power, and grave quality of this voice may be attained. It may, perhaps, assist the reader to discover that he is using the mode of utterance, which will promote

the habit of transferring (as it seems only) the vocal effort to the chest,—by stating that the voice in this case, is apt to change into what I formerly called the basso-falsette; thus producing that ‘double-lung’ kind of speech which consists of mingled bass and treble.

*Of Practice in Rapidity of Speech.* I have spoken of the solemn and deliberate character of discourse produced by slow time and long quantity.

Extreme rapidity of speech may be employed as a means for obtaining a command over the uses of the voice. The difficulty, in this case, of making transitions from one position of the organs of articulation to another, requires an exertion which tends to increase the strength of those organs, and consequently enables them to perform all moderate progressions, without effort or hesitation. I would recommend the utmost possible precipitancy of utterance; taking care not to outrun the complete articulation of every element: and this makes it advisable to set the lesson on some discourse which has long been fixed in the memory, that there may be no embarrassment by the distracting effort of recollection.

I do not see much advantage in an elementary practice on the Emphatic vocule, Aspiration and Guttural emphasis. There is no difficulty in the execution of these functions that requires the exclusive attention which an elemental system of practice is meant to secure; nor is there any thing to be effected thereby, which may not be accomplished in the current of discourse.

I have thus, here and elsewhere enumerated the elements that constitute, as far as I know, the whole of speech. The only question upon the mode of instruction to be employed, is—whether we should aim to acquire a full power over these constituents, from their assemblage in current discourse, or from a separate and repeated practice on their individual forms.

I need not propose arguments in favor of the analytic and elementary system to those, who, from the habit of acquiring the sciences, have formed for themselves economical and effective plans of education. It is well for all others to take opinion in this matter, for a while at least, upon faith; and to know that the only reason why elocutionists have never employed this mode, is because they have been ignorant of the subdivided

functions of speech. There are too many examples in science, of the useful application of the result of analysis to the purpose of rudimental instruction, to suppose that the same means would not have been adopted in elocution, if they had been within reach of the master.

Not to cite instances from those graver studies which proceed by the alphabetic steps of elementary principles ; and with no intention to shame the 'genius' of an elocutionist and his grammar of imitation, let us go to the Ring and see the *Science* of muscular attack and defence, an over-match for the best efforts of strength and passion when undirected by gymnastic skill. The 'fancy' have really made no slang-like or degrading application of the word. Science, as we usefully regard it, does no more than lay down, for art, those efficacious rules, which sagacity has drawn from observation and trial : and though it may not always ennoble what it touches, it takes from it the characteristic of brutality ; which is defined to be—the instinctive execution of what is not understood by the agent. Yes, even Boxing, low yet skilful as it is, may be called the Science of Brachial defence ; and believe me reader, that the elementary training in its positions and motions, carries not more superiority over the untaught arm, than the definite rules of elocution, founded on a knowledge of the elements of the voice, will have over the best spontaneous achievements of passion.

I beg not to be misunderstood on this point. I do not say that instruction can create the essential powers of a speaker : but I know it can improve and direct them. 'Passion,' says a writer, 'knows more than art.' It may know more than art. But art sometimes knows better than passion. The display of the passions on memorized discourse, is not always addressed to those who are under the sympathetic influence of those passions. When it is so, or when, at moments, the speaker can raise that sympathy, all is right that passion does. When, however, we are in that state of deliberation which contemplates what passion should be, there arise such comparisons between what we feel ourselves, on the different occasions of excitement, and what we observe in others when under the influence of it, that we are obliged to call up from taste, some ideal rule to settle an uncertainty of opinion.

I look for no more, from a well devised practical system of



elocution, than we are every day receiving from established arts. All men speak and reason, for these acts, as far as we know, are as natural as passion ; but the arts of grammar, rhetoric and logic, teach us to do these things in the best manner. In short, doing them in the best manner is signified by the name of these arts.

The subject of elementary instruction, here in view, may be regarded under another aspect.

There is in man a will; with a system of muscles which the common calls of exercise render obedient to that will, and which thereby produces motion in every direction, not forbidden by the nature of the joints. Now there is scarcely a boy of any physical activity or enterprise, who does not, on seeing a Circus-rider, desire to imitate him ; to catch and keep the centre of gravity through all the varieties of balance and motion. Yet this will not prevent his fall, on a first trial, however natural the tie between his will and all his muscles may be. The truth is, that without long experience, he knows not what is to be done ; or if he knows he is unable to effect it. With some analogy to this case, there are many persons, not destitute of feeling or passion, who have a free command of the voice, on the common occasions of life, but who betray a faltering tongue if they attempt to imitate the varied power of the long-practised speaker. When the voice is prepared by elementary trial, the feeling which prompts the expression will find the pliant and strengthened organs ready to furnish a satisfactory and elegant accomplishment of its designs.

The organs of speech are capable of a certain range of exertion : and to fulfil all the demands of a complete elocution, they should be carried to the full extent of that capability. Those persons who possess both active and delicate feelings, and who exercise themselves in recitation, are always approximating towards this utmost play of power in the voice, by the ordinary mode of instruction ; and do in a course of years effect nearly all that the organs are susceptible of. But the elementary mode here proposed, being founded on an analysis of speech, at once points out to the pupil what is to be attained, and thus invites him to the accomplishment of every vocal possibility.

It was not until long after the invention of the bow for the



touch of stringed instruments, that its use was subjected to accurate observation. A few belonging to that class of mankind who find out, themselves, the best way to effect their object, may have exhibited rare instances of skill in its management. But as soon as science had made something like an analysis of their dexterity, the master was able to point out to the pupil the muscular sleight of elbow and wrist which its handling requires; their combined and successive motions; together with that full feeling of the will, as it were, present in the muscle, which ensures undeviating steadiness in every sweep, and gives the power of a sort of conscious spasm for the purpose of a momentary touch. When these points were ascertained, instruction began to adopt the economy of elementary rules; and velocity, precision, smoothness and variety of execution, became common accomplishments in the art of Bowing.

When an attempt is made to teach an art without commencing with its most simple elements, combinations of elements pass with the pupil for the elements themselves, and holding them to be almost infinite, he abandons his task as hopeless. An education by the method we are here recommending reverses this disheartening duty. It reduces the seeming infinity to computable numbers; and I anticipate, with no little confidence, that one of the first comments on the foregoing analysis, will refer to the unexpected simplicity of means which is there shown to be operative in the production of the unbounded permutations of speech. Nay, this essay itself will fare better than other similar efforts in science, if some of the perishing criticism of the day should not find good reason with itself, for overlooking the difficulty of tracing the mystery of speech to its palpable roots, by being told how few they are.

When I speak of the best mode of instruction in elocution, I refer to that which produces the highest end and utmost finish of utterance. Any kind of speech, which does not mistake the price, will serve for buying and selling. But where the powers and beauties of the voice are made the subject of pleasure, it becomes necessary to employ the most comprehensive and the easiest means for its cultivation. It would be possible even without regard to the alphabet, to teach a savage, by making him follow a master in reading current discourse.

So speakers have been taught by a similar process of imitative instruction. But I know well, and others shall know hereafter that the analysis of words into a graphic alphabet, and the rudimental mode of teaching instituted thereupon, do not give more facility, in the discriminations of the eye on a written page, than the mode here proposed will afford to the student of elocution, who wishes to excel in all the useful and elegant purposes of speech.

Let the master and the scholar meet without books. Let the master exemplify the graceful spiring of the vanish; the effect of the second and other intervals of pitch. Let him make the scholar sensible of the difference of these intervals by separate utterance. Let him show the peculiarities of a rising and of a falling movement; in short, let his lessons consist of his alphabet of vocal functions throughout the whole of the elements. Let the scholar practice these things as a task when he retires; and on returning to his master, let it not be to hear him read, and vainly try to imitate him, but to repeat his practised elements, and to hit at once any required mode of voice. When he is completely familiar with these rudiments, then let him read with his master.

If the high accomplishments of elocution are an object of ambition, the system of instruction offered in this section, will furnish the easiest and shortest means for success.

After all that has been said, the best contrived scheme will be of little avail, without the utmost zeal and perseverance on the part of the learner. It is an impressive saying by an elegant genius of the Augustan age, who drew his maxim from the Greek Tragedy, and illustrated it by his own life and fame, that 'nothing is given to mortals without indefatigable labour;' meaning thereby that—those works which, from their rare and surpassing merits are supposed to proceed from a peculiar endowment by Heaven, are, in reality, but the product of hard and unremitting industry.

It is pitiable to witness the hopes and conceits of ambition, without the accompaniment of its requisite exertions. The art of reading well is one of those accomplishments which all wish to possess, many think they have already, and some set about to acquire. These, after a few lessons with an elocutionist, and no toil of their own, are disappointed at not becom-

ing themselves at once masters of the art, and abandon the study for the purpose of entering on some new subject of trial and failure. Such cases of infirmity are in part a result of the inconstancy of human nature; but they chiefly arise from defects in the usual course of instruction. Go to some, may I say—all of our colleges and universities, and observe how the art of speaking,—is not taught there. See a boy of but fifteen years, sent upon a stage, pale and choking with apprehension, in an attempt to do that, without instruction, which he came purposely to learn; and furnishing amusement to his class-mates, by a pardonable awkwardness, which should be punished, in the person of his pretending but neglectful preceptor, with little less than scourging. Then visit a Conservatorio of music,—observe there the orderly tasks, the masterly discipline, the unwearied superintendence, and the incessant toil to produce accomplishment of voice; and afterwards do not be surprised that the pulpit, the senate, the bar and the chair of medical professorship are filled with such abominable drawlers, mouthers, mumblers, clutterers, squeakers, chanters, and mongers in monotony: nor that the schools of singing are constantly sending abroad those great instances of vocal wonder, who sound along the high places of the world; who are bidden to the halls of fashion and wealth; who sometimes quell the pride of rank, by its momentary sensation of envy; and who draw forth the intelligent curiosity, and produce the crowning delight and approbation of the Prince and the Sage.

## SECTION XLIX.

*Of the Rythmus of Speech.*

IN the section on Time I alluded, in the course of argument, to the subject of Rythmus. I endeavoured then to show the circumstances under which stress and time, or as they are otherwise called, accent and quantity, produce by their alternations the agreeable impressions of verse. I now offer a somewhat more formal account of this matter, with the design to speak of the Rythmus of prose : and for the purpose of noticing, in as few words as possible, the ingenious system of Mr. Steele, on the subject of accentuation and pause : this being one of the first results, in modern times, of an inquiry into the philosophy of spoken language.

As speech consists of a succession of accented and unaccented syllables, Mr. Steele supposes all discourse to be separated into parts ; which being made in reference to accents, may be called *Accentual sections*. These he includes between vertical bars, as in the following notation :

7 In the | second | century | 7 of the | christian | era |  
 7 the | empire of | Rome | 7 compre | hended the | fairest |  
 part of the | earth | 7 and the | most 7 | civilized | portion of man |  
 kind |

The constructive principles of the accentual sections are these. The first syllable of each section is accented, that is, a bar is to be drawn before each accented syllable or emphatic monosyllabic-word. But it appears in the fourth section of the above example, that a bar is drawn before the particle ‘of’ which is neither accented nor emphatic. In this case, and there are others like it in the example, the place of an accented syllable is occupied by a symbol, denoting a pause equal to the time consumed by a syllable when present. Each section is supposed to contain a heavy and a light portion ; the heavy being



the accented syllable and the light the unaccented. If, in affixing the bar before a heavy syllable, there should be no following light one in the section, which happens when two accented or emphatic words immediately succeed each other, a pause must occupy its place ; as in the section consisting of 'most' in the above example. When the first part of the section is an indefinite quantity the use of the subsequent pause, may be superseded by prolonging the accented word to the required duration of the section, as in the word 'Rome : ' for it is assumed in this system, that all the accentual sections are of equal time, like the bars in music. If the number of syllables included between the bars is so many as to require an improper precipitancy of utterance, in order to make the time of the sections equal, it becomes necessary to throw in a bar before the light syllables of that precipitate group, and to set a symbol of rest in the place which would have held the heavy or accented syllable, if the section had been entire. Thus in the example, we might say, | 'century of the' | in one section ; but when the sentence is read deliberately this section is too long. It is better ordered in the example, by a subdivision, and by putting a slight pause in that place which should be occupied by an accented syllable.

It will perhaps be asked here—what is the meaning of these divisions ? And what useful purposes do they serve in instruction ?

All the works on elocution before the time of Mr. Steele, recommended the accurate accentuation of words, and a strict attention to their separation, at the proper places for pausing. Mr. Sheridan indeed has given a notation for rhetorical pause and emphasis. But he has proposed no scheme, to draw the attention of the pupil to the subject of accent. That this subject is of the utmost importance in the schools of elocution, will be admitted by those who have observed the manner in which children learn to read : for the close attention which their ignorance requires, and the slowness of utterance, lead them to lay an equal stress upon every syllable or at least upon every word. This habit continues a long time after the eye has acquired a facility in following up discourse ; and in some cases infects pronunciation throughout subsequent life. The notation of Mr. Steele which has a symbol for each degree of stress,

would certainly obviate this tendency, by furnishing the pupil with a guide to accentuation, in the absence of the master. I do not say that this object would not be attained, in a degree, by employing the common mark of stress on all accented syllables : But even this is never done, and if it were, it would not be as definite as the conspicuous division by bars ; nor would it include the indication of pause, together with other points enumerated in Mr. Steele's system.

One of the objects of a scientific institute is to point out what is necessary in the art, even if it is not able to tell the exact mode of executing it : and I venture to assert that no person, who has looked into Mr. Steele's system of notation, will hesitate to acknowledge that it has set the subjects of accentuation and pause in an entirely new light before him.

This notation will not indeed inform us what syllables are to be accented or emphatic, nor where the pauses are to be placed : but it will enable a master, who knows how to order all these things in speech, to furnish that which most men require for every thing they do—a copy. If a boy is taught by this method, he acquires the habit of attention to the subjects of accentuation and pause, which may be readily applied in ordinary discourse.

I have here gladly embraced an opportunity to notice the labours of Mr. Steele, who was among the first to shriek out at the incubus of ancient prosody which has crouched so close on the bosom of his own and of every modern language. It was not my intention to set forth the whole of this system, nor to vouch for all its points. It has able advocates, and their works and lectures, both in this country and in Europe, render a design of this sort unnecessary from me.

Mr. Steele's work is quite original, but it is not systematic ; and his contradistinction of what he calls Poize, from the functions of time and stress, is altogether notional and cloudy.\* I have taken this short and perhaps unsatisfactory view of a part of his essay, merely as prefatory to the few following remarks on the subject of rythmus.

\* Mr. Steele first published his views, under the title cited in the introduction, to this essay. A few years afterwards he gave a second edition of his work with the title of 'Prosodia Rationalis.' In this last there is very little addition to the former print ; and that is not material to the system.

The rythmus of language is—that perception which the ear has of accent, quantity and pause. Or in other words,—a certain succession of syllables, having different degrees of stress or quantity, and this succession being divided into portions by pauses, constitutes one important cause of the agreeable impression of the current speech.

There are two modes of disposing the alternate force and remission of stress, in the construction of rythmus. One proceeds by a regular repetition of the same order of accents. This is called Verse. The other has no formal arrangement of its strong and weak, or long and short syllables. This the reader must know is Prose. The doctrine of the order of syllables in verse constitutes what is called prosody. This subject having been largely treated by authors, and being beyond the design of this essay, I shall pass it by, with the remark, that—if English prosodists will listen to their own language, when they undertake to analyze it, and forget what the old grammarians have said upon the subject of time, which I am not prepared to admit that they themselves understood, their science will be more intelligible, and their rules of practice more useful to the student.

Though the broad distinction between prose and verse consists in the more irregular sequence of accent or quantity in the former : still they seem to compromise their differences to a certain degree in their respective attempts at excellence. For the best poetic rythmus is that which admits occasional deviations from the current of accentuation : but these deviations do not continue long enough to destroy the general character of regularity ; the order returning before the ear has forgotten its previous impression. Prose on the other hand, is constantly showing the beginning of a regular rythmus : but before any series of accent or quantity has time to fill the ear with its method, the cross-purpose of a new succession destroys the order of incipient versification.

The sources of variety, beauty and force in rythmus may be learned from the following general view of its construction.

In ordinary pronunciation there may be several consecutive monosyllabic-words marked by the abrupt accent ; in which case there is necessarily a momentary pause between them : or there may be an accented syllable followed by one or more,



but not exceeding six that are unaccented ; the average proportion being about one accented syllable to three unaccented. Hence it appears that the divisions which I have called accental sections, and which are included between the vertical bars of Mr. Steele's notation, may consist of from one to five syllables, and with considerable care and skill in the effort, sometimes of six. Consequently if a rythmus were formed on the function of accent alone, a series of these differently constituted sections, would furnish the ground work for considerable variety. Thus in the above example, the sections consist of from one to four syllables ; for the third and fourth may be thrown together by omitting the bar and the pause, without at all obscuring the sense : and these being arranged in varied succession, is one of the causes of the agreeable rythmus of this sentence.

I hope the reader will not now deny that the ear is as strongly attracted by quantity as by stress. When therefore the former accident is employed in composition, the means of variety are multiplied. In the following sentence I have marked in italics, those syllables which make an impression by their quantity, and thus add dignity to the varied accental rythmus.

The masters of the *fairest* and most wealthy climates of the *globe*, turned with contempt from *gloomy hills*, assailed by the wintry tempest, from lakes *concealed* in mist, and from *cold* and *lonely* heaths, over which the *deer* of the forest were chased by a troop of naked barbarians.

Besides the variety and impressiveness thus arising from stress and quantity, the rhythmic effect is further diversified by including one or more accental sections within the boundary of pauses. If I may be allowed the useful economy of the term, I would call the portions of discourse so formed, Pausal sections. They may consist of a single word : but the structure of style, and ease of utterance, rarely admit of their containing more than twenty syllables. In the following example I have included the pausal sections between the upright bars, that the order and variety of the succession may be surveyed by the eye. I have marked merely the place of the pauses, in clear and impressive reading, without designating the several durations of those pauses.



It is gone | that sensibility of principle | that chastity of honor | which  
 felt a stain | like a wound | which inspired courage | whilst it mitigated  
 ferocity | which ennobled whatever it touched | and under which | vice  
 itself | lost | half its evil | by losing all its grossness. |

The effect of the variety I am endeavouring to illustrate, may perhaps be made more conspicuous by contrasting it with the monotony of the antithetic style. The following sentence exhibits too much art in the construction of its pausal sections.

When I took the first survey of my undertaking | I found our speech |  
 copious | without order | and energetic | without rules | wherever I  
 turned my view | there was perplexity | to be disentangled | and con-  
 fusion to be regulated | choice was to be made | out of boundless variety |  
 without any established principle of selection | adulterations were to be de-  
 tected | without any settled test of purity | and modes of expression | to  
 be rejected or received | without the suffrages of any writers of classical repu-  
 tation | or acknowledged authority. |

Such a measuring process, if used occasionally, may give a variety to discourse. But when made the characteristic feature of composition, it indicates formality and stiffness of ear in the writer,—makes mere arithmetic of speech, and shuts out the strong lights of verbal delineation. There seems too to be a want of dignity in this kind of rythmus; and those who affect it, scarcely perceive how near they approximate to the principle of the ludicrous: for when its features are slightly surcharged by caricature, it really becomes so. The principle to which I allude, is that of a resemblance in sound, with a difference in sense. The similarity in the number of words, together with the like places of their accents, and the equal count of syllables, under which some writers set forth the strongest antithesis in ideas or sentiments, has not exactly the equivocation of a pun, but it always reminds me of it.

The monotonous effect of a series of similar pausal sections is conspicuous in the following example from the poems of Ossian. It is however fair to remark, that as there are but two trisyllabic words in the extract, and not one polysyllable, the defect of variety in accent and remission must be taken into account, in the faults of its rythmus.

And is the son of Semo fallen? | mournful are Tura's walls. | Sorrow dwells at Dunscai. | Thy spouse is left alone in her youth. | The son of thy love is alone! | He shall come to Bragela, | and ask why she weeps? | He shall lift his eyes to the wall, | and see his father's sword. | Whose sword is that? | he will say. | The soul of his mother is sad. | Who is that, | like the hart of the desert, | in the murmur of his course? | His eyes look wildly round | in search of his friend. | Conal | son of Colgar | where hast thou been | when the mighty fell? | Did the seas of Cogorma roll round thee? | Was the wind of the south in thy sails? | The mighty have fallen in battle, | and thou wast not there. | Let none tell it in Selma, | nor in Morven's woody land. | Fingal will be sad, | and the sons of the desert | mourn. |

The pausal sections are here nearly all of equal length, and this cause, together with the frequent occurrence of the cadence, produces the wearisome character of the rythmus. Doctor Johnson once said that there were many men and women and children in Britain who could write such poems as those ascribed to Ossian. I have too many agreeable and grateful recollections of Scotland, to quarrel with her partiality, if she has any, on this point: but surely there is not a Roscius who can read them. We have indeed a vast fund for variety, in the elements of speech; but I doubt their sufficiency to meet the demands of this composition, without transgressing the rules of a just and expressive intonation. In short the passage, like many others by better poets, can not be read with satisfaction, before the judgment of a discerning ear.

Let us compare the preceding extract with the few first lines of Burke's episode on the Queen of France: which in elegance, variety and impressiveness of mere rythmus, and exclusive of some rhetorical ostentation, is not surpassed in the English language.

That both the accentual and pausal sections may be graphically made, I here present it under Mr. Steele's notation, as scored by Dr. Barber in his 'Exercises in Reading and Recitation:' omitting the symbols for the light and heavy accent.

7 It is | now, | sixteen or | seventeen | years | 7 since I | saw the |  
queen of | France, 7 | then the | Dauphiness, | 7 at Ver | sailles: |  
7 7 | 7 and | surely | never | lighted on this | orb, | 7 which she |  
hardly | seemed to | touch, 7 | 7 a | more de | lightful | vision. | 7 7 |  
| 7 7 | 7 I. | saw her | just a | bove the ho | rizon, | 7 7 | decorating

and | cheering | 7 the | elevated | sphere | 7 she | just be | gan to |  
 move in: | 7 7 | glittering | 7 like the | morning | star; | 7 7 | full  
 of | life, 7 | 7 and splendor, | 7 and | joy. |

Oh! | what a | revo | lution! | 7 7 | 7 and | what a | heart 7 |  
 must I | have, | 7 to con | template | 7 with | out e | motion, |  
 that 7 | 7 ele | vation | 7 and | that 7 | fall. |

The agreeable effect of this rythmus may be traced to the following causes.

*First.* The alphabetic elements are varied throughout: and except the repetition of sound in 'teen' and in the words 'lighted' and 'delightful,' 'cheering' and 'sphere,' they do not press upon each other.

*Secondly.* The words have from one to four syllables; and these are finely alternated with each other. The accentual sections vary from one to five syllables in extent.

*Thirdly.* The Pausal sections consist of from two syllables to ten: and their different lengths are intermingled in succession.

*Fourthly.* The effect is still further varied, by an occasional coincidence of the temporal accent with that of stress: and the dignity and force of the phraseology is heightened, by the occurrence of these long syllabic quantities at the place of the pauses: as in the words—*years, Versailles, orb, horizon, sphere, move, star, joy and fall.*

*Fifthly.* The order of the rythmus has just enough regularity to produce the smooth effect of verse, without allowing the reader to anticipate any subsequent measure.

The only exception I am disposed to make to the commendation of this extract, is produced by the consecutive accents at its termination. A spondaic cadence, if not designed for some extraordinary case of expression, or for variety in a series of short sentences, is always, to me at least, disagreeable.

The instances of rythmus which have been selected, are from prose-composition of elevated sentiment, and dignified style. But the plainest phraseology may be brought under the influence of the same rules of accent, quantity and pause. In the hands of a person of fine rythmic ear, even a letter of business, with its enumeration of particulars, may be made to flow with variety and smoothness.

It is unnecessary to go into a further detail on the subject of rythmus. Much might be said in illustration of its powers and beauties, both as existing in the current of discourse and in the conspicuous place of the cadence. But we leave this to the Rhetoricians.



## SECTION L.

### *Of the Faults of Readers.*

IT is a prevailing opinion that persons who speak their own sentiments, in social intercourse, always speak properly : and that transferring this natural manner, as it is called, to formal reading and recitation, will ensure propriety of utterance.

This idea has arisen from an ignorance of the functions which constitute the beauties and defects of speech. Without a knowledge of that analysis which must be the foundation of definite criticism, teachers have been obliged to refer to the spontaneous efforts of the voice as the only assistant means of instruction. It is true, the natural manner is more like the coveted excellence, than the first attempts of the pupil in reading ever are ; still the faults of ordinary conversation, are similar to those of reading, though they are less apparent. Perhaps the prevalent opinion proceeds from a belief that a just execution must necessarily follow a full understanding of the sense, and a true feeling of the sentiment of discourse, both of which are supposed to accompany colloquial speech. No one indeed can read correctly or with elegance, if he does not both understand and feel what he utters : but these are not exclusively the means of success. Sense and feeling must have a well tempered material in the voice to work upon.

I admit that the self-prompted efforts of speech exhibit in some instances, those proprieties of emphasis and intonation, which are required for common narrative, argument and pas-



sion. But they will be very far from satisfying that discrimination which will be strictly made when speech is offered to the ear of a refined and analytic taste.

I admit likewise the almost unaccountable difference sometimes observed between the capabilities of the colloquial voice, and the same voice when exerted in a formal attempt to read. Mr. Rice in his 'Introduction to the art of Reading' relates the case of a person, who failed to repeat, with even tolerable propriety, the very words purposely written down, which he had been overheard to utter spontaneously, with all correctness in emphasis and expression. There seems, in such cases, to be no want of energy of mind or feeling, nor of flexibility in the voice. But when a discourse, embracing any sense and sentiment, is read, even by its author, the occupation of the eye distracts attention from the meaning, or permits it to be fully recognized, only when shown upon a single point. For if that meaning is to be gathered from several words, the necessary forerunning and retrospection of the eye, render the proper management of the voice impracticable to those who have not, by long exercise in the art of reading, acquired an almost involuntary habit of associating the functions of speech with corresponding thoughts and feelings.

But whatever may be the cause of the difficulties of reading well, faults and flagrant ones too do prevail in the art. Having therefore prepared the way for pointing out the nature of these faults, by describing the pure and elegant uses of the elements, I shall now endeavour to make the reader acquainted with the most common deviations from what we have presumed to adopt as the standard of excellence.

He who undertakes to note justly the defects of an art, must carry with his censure a knowledge of its perfections. Faults are, every where, but relative to merits: and in elocution, they are the misplacing only of those elements which constitute its beauties: for some of the finest colors of the art are dipped from the very sources of its faults. He who declares his perception of blemishes, and yet can not at the same time define and enumerate graces, speaks without candor, or as the dupe of authority. Let us then try to perform these inseparable duties, by giving the outline of a just and elegant elocu-

tion, along with a particular enumeration of the vices of utterance.

In treating of the phenomena of speech, I have always kept in view the best usages of taste. It will be little more than a recapitulation therefore to say—The faultless reader should possess for various occasions, all the qualities of voice from the full laryngeal bass of the orotund, to the lighter and lip-issuing sound of daily conversation. He should give distinctively that pronunciation of single elements and their aggregates, both as to quantity and accent, which accords with the habitual perceptions of his audience. His plain melody should be diatonic, and varied in radical pitch, beyond discoverable monotony. His simple concrete should be equable in the rise, and diminution of its vanish. His tremor should be under full command for the occasions of grief and exultation. Observation and judgment must have settled for him, the places and degrees of emphasis; and a knowledge of its many forms, must have suggested the employment of them for variety and expression. He should be able to protract his voice through every extent of quantity, and in every concrete interval of the rising and falling scale. He must have learned to put off from the dignified places of reading that canting or affected intonation which the planned courtesies and sacrificing servilities of life too often confirm into habit; and to moderate in his interrogations that keenness which is bred up in the vulgar tongue, by the idle inquisitiveness of the world's impertinent curiosity. Finally he should have for this, as for every other Fine art, a delicate sense of the Sublime, the Graceful and the Ridiculous. A quick perception of the last, is absolutely necessary to guard the exalted works of taste against the accidental occurrence of its causes.

It may be considered presumptuous in any one to pretend to fix a standard in the Art of speaking. Before the analytical development of speech this could not have been done. The discovery of the elements has now been accomplished; sufficiently at least to advance some steps towards a system: and it seems no unfair anticipation of what must hereafter form the great point in the schools of elocution, to suggest such a use of these elements as may satisfy the cultivated ear.

In marking out the basis for a system in this art, I looked to

the purest instincts of nature in children and brute animals, for instances of passionate expression : and to choice examples in common life, and on the stage, for the best effects producible on the single and combined elements of speech. By selection from these sources, I have endeavoured to frame an Ideal Pattern of vocal beauty, precision, and force.

But I was not slightly influenced by a perception of the fitness of the system which has been suggested. The term fitness may be explained by reference to a part of the foregoing analysis. We have pointed out the difference, and future time shall acknowledge its importance, between the use of the second in the plain diatonic melody, and the employment of the semitone, and higher intervals of the scale for peculiar purposes of expression. Now few speakers make the respective appropriations of these constituents : their current melody being frequently intonated in the vanish of the third or fifth, or in the wider ranges of the wave. Such an application of these striking intervals annuls the final cause of nature, in the institution of different intensities of pitch : confounds their intended distinctions : prevents the repose of the ear on the unimpassioned diatonic : and wears down that sharpness of the higher intervals, which is required for the occasional purposes of strong expression. This is what I mean by—drawing a system from the fitness of the thing.

There is another consideration which must justify the establishment of a system of some kind, if it should not plead for the one which has been offered. When the constituents of speech are described and known, the precision of their use must become an object of attention and criticism with an audience. If there be an admitted rule for their application, the representation of thought and sentiment, will be more uniform, and expression will therefore have more force. When we vary the sign of the same thought we take from the clearness of its meaning. If we constantly whine in the chromatic melody, or cry out emphatically in the wider intervals and in the wave, to no purpose of complaint or surprise, we shall in vain seek for sympathy when the wolf of feeling in reality seizes upon us.

In looking for a standard of excellence in the art of elocution, we are always referred, as in the other fine arts, to Nature. But nature in this high pattern-capacity eludes the power of defini-



tion : and like Liberty with a patriot,—Orthodoxy with a sectarian,—Experience with a physician,—and Right with a moralist—shows as many faces as there are tongues that take her name in vain. If nature is to be the canon she must be so by the single instances she produces. If her excellencies are scattered over the species, it is Art that must collect them into one individual. But where is the instance in nature worthy of imitation? Is it to be found in the drawl of the spiritless? In the snappish stress of the petulant? In the eternal whine of the unhappy? The short quantity and precipitate time of the frivolous? In the continued diatonic of the saturnine? In the even drift, whatever be its mode, of the passion-masking hypocrite ; or in the efforts of those morbid sensibilities which exaggerate every feeling? Shall we find nature's paragon among the chatterings of the great market of life, that hurries through its melody by the straight line of the monotone ; that denies itself the repose of the cadence ; and that in bidding for its bargains of trade or notoriety, strains itself to the topmost note ?

These are the individual instances of vocal deformity presented by nature, which we daily suffer to pass without comment, because we are engaged at the moment with other thoughts and designs : and which we perceive only when the voice itself, as a matter of taste, is the exclusive object of attention.

But though nature affords no single instance of general excellence in speech, she has diffused throughout the species all the elements of perfection : and it is the gathering in of her proprieties and beauties which constitutes the—Art of Elocution.

The Canon, so called, of statuary in Greece, which represented no singly-existing form, was produced by Polycletus only after ages of gradual improvement. If individual nature might be taken as a model in the arts we would not at this late day be so often obliged to listen to bad readers ; nor to hear such clashing opinions, upon those who pass for the best. The productions of taste would have forerun their present needed cultivation ; and in reverse of the tedious growth of centuries, would like the garden of Eden, have been ripe at their planting.



Imagine yourself, says the master in Elocution, to be delivering the sentiments of an author as if they were your own.

I grant that such a rule may supply the want of better instruction; it may serve for common-place sentiments and thoughts, and may exempt a pupil from some of the greater faults of speech. On the other hand, suppose the art of reading to be exerted in representing the utmost power of description and imaginative creation by a poet. How will the rule of substitution meet this case? I have more than once seen, on the stage, the pitiable result of what was designed to be an imitation of nature.

All the Fine Arts are essentially—*Arts*. The high execution of their works and the full prizing of them, are purely the result of close observation, extensive comparison, and choice selection and combination of the scattered constituents of their respective subjects.

Many of the faults of speakers, arise from their being taught by imitation alone. As long as there has been a history of the stage, so long, actors have been classed in the school of some predecessor or contemporary master. But inasmuch as there is always one who by chance or merit is the Leading Spirit of the lustrum, (for where there are no principles to direct instruction, even five years is a long life for fashionable fame,) it generally happens that his faults may be recognized throughout a crowd of pupils and imitators. From the want of some definite corrective, the bad reading of a Pulpit sometimes infects a whole class of students; who circumscribe the active benefits of their master's solemn instruction, by taking up his sinful elocution.

It may be said—If we establish a system of principles, all readers must be of one school; and this will be equivalent to imitation. There would be one school; but the similarity would not be in its errors. Many actors who differ from each other in their faults, yet perform some short sentences with identical excellence, without exciting a remark upon that equality. It is only upon one of those violent outrages in utterance, that we hear in a moment the whispered name of a prototype, from twenty parts of a theatre. Grave copies in speech, like its gay mimickries are generally made on bad pro-

nunciation, monotony, whining, false cadence or no cadence at all, and precipitate and unaccountable transitions.

But, enough of argument on this subject. The art of elocution has never presented that abstract composition, which in analogy with the delineation of Form, may be called—the Ideal Beauty of Speech. The mere instinct of individual nature has been followed, and the best skill of the voice has perhaps fallen short of the yet reserved resources for oral accomplishment: whilst the common herd of pretenders afford an endless list of deformities.

In noticing the faults of readers I do not wish to speak of the natural defects of the voice. It is difficult however, to draw a distinction on this subject. Too many of the wilful vices of life, through self-delusion, pass for misfortunes: and it can scarcely be made a question, whether the impudent display of even natural failings should not shut out the subject from indulgent commiseration.

There are three points, of the first importance to a speaker: and if deficiencies therein are not to be called misfortunes, we may rank them as great and generic faults. I mean the defects of the Mind, of the Ear, and of Industry.

Speech is intended to be the sign of every mode of thought and feeling. If therefore the mind of a scholar be not raised to that generality of condition which can assume all the powers of expression, he will in vain aspire to great eminence in the art. If his mind is endued only with the diplomatic virtue of unruffled caution:—if it is of that character which compliments its own dulness by calling energy violence; and which drawls out in reprobation at the vivid language of truth:—if all its busy goings are but around the little circle of its own selfish schemes: if it has yet to hear, and never can be convinced that success in every art, is not more indebted to the plans of sagacity than to the perseverance of passion:—if the mind, I repeat it, is of such a cast, its possessor may perhaps by his best assiduity, satisfy his own uncircumspect judgment and taste, but he can never reach the higher accomplishments in elocution.

In speaking of the mental requisites for good reading, I must not overlook our frequent neglect to discriminate between Strong feelings and Delicate ones. The latter make the

finished actor ; and it is unfortunate for his art, that qualities which under proper cultivation insure success, are generally united with a modesty which retires from the places and occasions for displaying its merits : whilst the former in reaching but the coarse energy of the passions, are able to figure on the stage, only as the outrageous Herod, the brazen Beatrice, and the Buffoon.

The mind, or nervous temperament, must furnish the design of elocution : the ear must watch over the lines and coloring of its expression.

An ability to measure nicely the time, force and pitch of sounds, is indispensable to the higher excellencies of speech. It is impossible to say how much of the musical ear, properly so called, is the result of cultivation. There is however a wide difference even in the earliest aptitudes of this organ, and though the means of improvement derived from analysis will hereafter increase the proportional number of good readers, and produce something like an equality among them, still the possession of a musical ear must with other requisites, always give an unequivocal superiority.

I have spoken more than once in this essay, of Industry, the third general means for success ; the defect of which may be considered as an egregious fault in a speaker : and it certainly is the most culpable. It is here placed on high ground, along with mental susceptibility and delicacy of ear, those essentials which have been designated by the indefinite term 'genius.' In vain will the mind furnish its finest discriminations, or the ear be ready with its measurements, if the tongue should not lend the perseverance of its practice. It was by a figure of speech which took a part for the whole of the senses, that the happy curse upon mankind, doomed the taste to be gratified by the sweat of the brow. The ear too, can receive its full measure of delight, only through the long labour of the voice.

The faults of speakers are of almost infinite variety : but they consist of no unnamed elements. It seems as if nature had assumed in her adjusted system of signs, all the practicable functions of the voice. The corrupting art of the tongue in deforming her works, makes no addition to their constituents, but performs its part in human error, by misplacing



them. In pursuing the history of the faults of utterance, we may therefore follow something like the order which has more than once, in this essay, been given to the elements.

The four general heads under which we considered the accidents of the voice, are *Quality, Time, Force, and Pitch.*

*Of Faults in Quality.* This subject is so well known both in the art and in common criticism, that it is unnecessary to be particular with it. Harshness or roughness may be mentioned as one of the disagreeable qualities of the voice. The nasal is still more offensive. Shrillness may rather be called a quality than a state of Pitch. It never has dignity. It seems like a mockery of the voice : and though it is heard remotely, and draws attention, it does it with the attraction of a caricature. I think the huskiness of aspiration is more apt to be united with the orotund voice. It does not indeed diminish its gravity and sober grandeur, but it affects the fulness and clearness of its vocality.

The falsette occasionally exists as the current quality of the voice. Whoever has this fault, should speak on business and for his wants, but no more. We sometimes find persons on the stage, and in the senate and pulpit, who show the deformity of the falsette only at times, by the melody breaking from the natural voice on a single syllable. Every speaker has a falsette ; and the skilful can always guard against its improper use. When it occurs as a fault, it results either from the narrow compass of the natural voice, or from a defect of ear in the speaker : for not having an accurate perception of his approach to the falsette, he is unable to avoid the evil by a ready descent of intonation.

The falsette is common in the voices of women. It has with them a plaintive character ; and the melody at this high pitch is more apt to be monotonous.

*Of Faults in Time.* I do not mean to speak here of reading too fast or too slow. There is nothing new to be said on this point. But we who speak English are said by the report of the compilers of Greek and of Latin grammars, to know nothing of quantity, and to have none in our language. That bad readers, and persons who will not learn their own tongue, may know nothing of its quantity, is readily granted ; yet that it is an essential accident of every language, and that the



neglect of it is the source of many faults in ours, must be admitted by those who know the nature of syllabic time, and the proper uses of the voice.

There are two faults in quantity. Syllables may be too long or too short. When sentiments requiring short time, such as gaiety and anger, are otherwise expressed, it produces the vice of Drawling. This drawling may go through its excessive quantity, either as a wave of the second, or an equal or unequal wave of higher intervals, or as the notes of Song.

When deliberate or solemn discourse is hurried over in short syllabic quantity, the fault is no less apparent and offensive. This last named defect in reading, is by far the most common; and I have said more than once in this essay, because I wished to rouse the English ear to this subject, that the command over time in the pure equable-concrete of speech is found only in speakers of fervent feeling and long practice. Such persons acquire the use of protracted quantity, because it is through long syllables, that the powerful expression of concrete intonation is effected. It is from ignorance of this fact, that some speakers, neglecting the variety and smoothness of the temporal emphasis, give prominence to important syllables only by some of the hammering modes of stress.

*Of Faults in Force.* The misapplication of the degrees of loud and soft to the general current of discourse is sufficiently obvious. But in the various forms of local or syllabic stress, the faults of speech have been less known and consequently less avoided.

Many speakers, from a difficulty in commanding the variations of quantity, execute most of their emphasis in the form of force; yet even in the use of this apparently simple element, they are not free of faults. Some, after the manner of the Irish, employ the vanishing stress on all emphatic syllables. This has its meaning in expression, but it is misplaced except on the occasions formerly pointed out. A want of the sharp and abrupt character of the radical is not an uncommon fault. It is most commonly found in the dull and indolent: for nothing shows so clearly, the elastic temper of the voice and mind, as the ability to explode suddenly this initial stress.

It is not my intention to go into a notice of the faults of emphasis, in the common acceptance of the term. They all re-

solve into a want of true apprehension in the reader. It should, however, be remarked, that through ignorance of the other constituents of speech, this well known subject of mere stress-laying emphasis, has acquired an importance in elocution which has assumed the very name of the whole art. 'How admirably she *reads*,' said a thoughtless critic, of an actress, who, with perhaps a proper emphasis of Force, was nevertheless deforming her part, by every fault of Time and Intonation. The critic was one of those who have neither knowledge nor docility; I therefore made no comment. Emphasis being almost the only branch of the art in which there is any thing like an approach towards a rule of instruction, this single function, by a figure of speech grounded on its importance, is taken in the narrow nomenclature of criticism for the sum of the art. Even Mr. Kemble, whose eulogy might have laid upon other merits, made his first stir of fame, if we have not been misinformed, by a new 'reading' of some of the lines in *Hamlet*.

We have awarded to emphasis its due degree of consequence. We have also given other elements theirs: and perhaps it may be hereafter admitted that much of the contention about certain unimportant points of stress-laying emphasis, and of pause, has arisen from critics on the drama finding very little else of the vast compass of speech, on which they were able to form for themselves a discriminative opinion, or on which they were willing to expose their ignorance to others. When hereafter we shall have more important matters to study and delight in, we may perhaps find that much of that trifling lore of italic notation, which now serves to keep up contention in a daily journal, will be quite overlooked, in the high court of philosophic criticism.\*

\* Some one, of those who like to make business in an art, rather than do it, has raised a question whether the following lines from *Macbeth*, should be *read* with a pause at 'banners,' or at 'walls:'

*Macb.* Hang out our banners on the outward walls  
The cry is still, *They come*.

To those whose elocution consists in such riddles, I propose the following from Goldsmith.

A man he was to all the country dear,  
And passing rich with forty pounds a year.

Now let them guess, or dispute, for the rest of their lives, whether the emphasis

I pass by the faults of pronunciation which depend on the misplacing of accents on syllables. Propriety in this matter is set forth in the dictionary, and the errors of speech may be measured by its rules.

I deprecate noticing the faults of speakers, in the pronunciation of the alphabetic elements. It is better for criticism to be modest on this point, till it has the sense or independence to make our alphabet, and its uses, look more like the work of what is called—wise and transcendent humanity : till the pardonable variety of pronunciation, and the true spelling by the vulgar have satirized into reformation, that pen-craft which keeps up the troubles of orthography for no other purpose, as one can divine, than to boast of a very questionable merit as a criterion of education.

*Of Faults in Pitch.* Speech has been peculiarly one of those subjects, in which we often pronounce upon the right and the wrong, without being able to say why they are so. We have resolved the obscurity in respect to the proprieties of intonation ; it will not be difficult on similar principles, to give the analysis of its faults.

*Of Faults in the Concrete Movement.* I have more than once spoken of that peculiar characteristic of speech, which consists in the full opening, the gradual decrease, and the delicate termination of the concrete. Now, as this structure is destroyed by the use of the vanishing and the thorough stress, it follows that their misplaced application must be regarded as a fault. The vanishing stress, which is exemplified in the jerk of Irish pronunciation, produces, when continued throughout discourse, a vulgar monotony : whilst the thorough stress gives a rustic coarseness to speech. Some readers seem incapable of carrying on a long quantity through the equable concrete ; substituting in place of it the note of song. The most remarkable instance of this speech-singing is that of the public preaching of the Friends, which I shall particularly describe among the faults in melody.

*Of Faults in the Semitone.* Who has not heard of whin-

should be on 'passing' or on 'rich': thereby to determine whether the good village parson was *passing* or superlatively rich, with his forty pounds; or merely considered by his parish, as very well off in the world.



ing? It is the misplaced use of the semitone. The semitone is the language of love, tenderness, petition, complaint, and doubtful supplication : but never of manly confidence, and the authoritative self-reliance of truth. This is the ground which entraps the sycophant, and even the crafty hypocrite himself. They assume a gentle persuasion, or a more tuneful cant, not only because they wish to make it appear that they are moved by a kind and affectionate spirit, but because they distrust or despise themselves, and are therefore governed by the feeling of infirmity or meanness. The honesty of conviction calls for no subsidiary arts of this sort : suspicion should therefore be awake, when the show of truth or benevolence is proffered under this cringing intonation.

The chromatic melody is more common among women. Actresses are prone to this fault, and it is one of the causes which frequently prevent their assuming the matron-rule of tragedy, and the dignified severity of epic reading. They sometimes intercede, threaten, complain, smile, and call the footman, all in the semitone. They can vow and love and burst into agony in *Belvidera*; but can not with masculine ambition, order the scheme of murder in *Lady Macbeth*.

The sentiments signified by the semitone, have been enumerated. Whenever it supplants the proper diatonic melody, it becomes a fault, and begins to be monotonous ; for when appropriate it never is so. I once heard the part of Dr. Cantwell, in the *Hypocrite*, played in the chromatic melody throughout. Perhaps it suited the mock virtue of the pious villain, but it certainly produced a palling monotony on the ear ; and the want of transition in voice, when he throws off the mask, in addressing his patron's wife, was remarkable. He was the knave and the lover in the same intonation. On the whole, the effect would have been more agreeable, if an abated, slow, and monotonous drift of the second had prevailed, with the use of the chromatic melody when required by the sentiment.

*Of Faults in the Second.* The ear has its green as well as the eye ; and the interval of the second in correct and elegant speech, like the verdure of the earth, is widely distributed to relieve sensation from the fatiguing stimulus of more vivid impressions. Though the diatonic melody, is the



predominating hue of a well composed elocution, is simple and unobtrusive, and thus affords a fine ground for bringing out the contrasted color of more expressive intervals ; it does, when continued into the place of this higher intonation, assume a positive character under the form of a fault.

The most striking instance of the misapplication of the second, is its employment for the sentiments which properly require the semitone. There are some persons of such a dull and frigid temperament, or with such inflexible organs, even when the feeling does not appear to be wanting, that they seem incapable, under ordinary motives, of executing the chromatic melody. Pain or the excitement of their selfish instincts will produce it : But in them it seems to be so slightly associated with a general tenderness of feeling, or so much beyond the limit of the will, that the most pathetic passages are given in the comparatively phlegmatic intonation of the diatonic melody. We sometimes see actors of such a temperament, on the emergencies of a night, cast to the part of lovers : and may occasionally hear from the pulpit the most fervent appeals of the Litany, and the humble petitions of extemporary prayer, uttered with the same matter-of-fact intonation which would be appropriate to the manner of repeating the multiplication table.

Some persons are so bound to the monotony of the second, (for when this element is thus misplaced it has the effect of monotony,) that we are often more indebted to grammatical construction, than to the voice, for a perception of their interrogations. It is the same too with their emphasis in those conditional and positive sentences which, for impressive and varied effect, respectively require the rising and falling interval of the third or fifth or octave.

One of the most important functions of the second, is its agency in the formation of melody. It was shown in the sixth section that the best effect of the diatonic arrangement is produced by a varied composition of the seven phrases. We have now to learn how far the common practice of readers, deviates from this assumed perfection.

*Of Faults in the Melody of Speech.* If the rule laid down in this essay, for constructing an agreeable succession of phrases, is exact, I must by that rule declare I have never heard a

speaker with a good melody. Players spend their time before mirrors, till grace of person is studied into mannerism, and expression of feature distorted into grimace. Emphasis too is teased in experiment, through every word of a sentence, and tested in authority, by all the traditions of the Green-Room:—but who has ever thought of the succession of pitch in his syllables, or imagined that faults may lie there!!

The *First* fault to be noticed is—the continued use of the monotone, or that of keeping on the same line of radical pitch; the vanish of the second or of higher intervals, being properly performed. I do not here mean that monotony which writers have observed, and have illustrated by the drawl of the parish clerk; for this is the note of song, and will be spoken of presently. The defect of variation, in radical pitch, now under consideration, is not so glaring as this old conventicle tune, nor has it at all the character of song. I wish I could be near the reader, to show the nature of this fault without a further waste of words. All I can say in description is, that it takes from speech a very agreeable effect arising from a perception of the contrast of pitch in the falling ditone; as the transition in this case is made from a feeble vanish, to a full radical, which in the diatonic succession, is at the distance of two tones below the summit of that vanish.

One of the causes of this fault in public speakers, deserves to be remarked here. I spoke of vociferation as a means for imparting vigor and fulness to the voice. But this exercise being made on a high pitch, sometimes tends to corrupt the style of melody. Speakers who address large assemblies, and who have not that clear vocality and distinct articulation which produce the requisite reach of voice, generally attempt to remedy the defect by rising to the utmost limit of the natural compass; and there hold their current just below the falsette. For fear of breaking into this, they dare not vary the melody by taking their pitch alternately higher: and the desire to preserve the diffusive effect of shrillness does not allow them to descend by radical changes. They consequently continue on one monotonous line: and thus vitiate their taste by the partial pleas of their own example; impair their melodical flexibility, if I may so call it; and blunt their perception of the variety of movement in a more reduced current of pitch.

This cause operates on the Bar, the Pulpit, and the Stage ; where the demands of the space to be filled exceed the common powers of the voice : but it is most conspicuous in the melody of those whose purposes lead them to address great crowds in the open air.

*Secondly.* Melody is deformed by a predominance of the phrase of the monotone, together with a full cadence at every pause. This perhaps is only found in the first attempts at reading by children and rustics.

*Thirdly.* By a mingling of the phrases of melody, but with a formal return of the same successions. In this case, the whole discourse seems subdivided into sections, nearly resembling each other in the order of pitch. The extent of these portions is generally determined by the length of entire sentences, or by the shorter divisions of their members. And I may now make a remark which properly belongs to the subject of rythmus,—that this peculiar habit of the ear in marking the sections of melody, as well as in forming accentual and pausal sections, has a very close connexion with the character of style in a writer. It certainly can not have escaped observation that there is a tendency in some persons to give equality to the length of their sentences : and this is in many instances dependent on their elocution. But the niceties of this subject will receive due consideration, at some future time, when we who speak English shall recover, or rather on this point, first receive common sense enough together with independence, to authorize a denial that the best method for studying our own language, is through the syntax and prosody of the Latin and the Greek.

There is no special form of melody assumed by all speakers ; each one falls into a habit of his own : though it is plain, from the very method of construction, that there can not be a great variety. All actors, except those of the first class, and they are not as finished on this point as they may be hereafter, all actors I say, are prone to this bird-like kind of intonation. They have a short run of melody which if not forcibly interrupted by some peculiar expression, is constantly recurring. The return forms a kind of melodial measure : and I now call to mind an Actress, once the vogue, whose intonation was filled with emphasis of thirds, fifths, octaves and waves ; and



whose melody could be anticipated, with something like the forerunning of the mind over the rythmus of a common stanza of alternate versification. Those who commit this fault will have no difficulty in recognizing and correcting it, if desirable, when the mirror of analysis is held before them.

The monotonous course of melody constitutes one of the signs by which the gallery, and some of their better dressed peers in the boxes, distinguish the voices of famous actors, and think they represent their real points of excellence, when they mimick only what is strongly offensive and worthless. In the fault to which I allude, the recurring portion of the melody in itself often consists of a properly varied succession of phrases: but by repetition you learn it too well. The whole current in this case reminds one of the festoon, which however beautiful in itself, was in abasement of Greek architectural taste, joined in endless continuation around the frieze; instead of suggesting a resemblance to that successive variety in composition which adorned the metopes of the Parthenon.

*Fourthly.* I have known more than one speaker with this fault.—Sentences or members of sentences are begun aloud on a high pitch, and ended with a low and almost inaudible voice: and this is continued successively throughout a whole discourse. It would be hard to find out the meaning of this fault, or to discover such a shadow of apology for it, as many worse offences in life can claim for themselves.

One of the persons thus addicted to this monstrous piece of affectation, for no natural or conventional motive could ever have suggested it, was, by the associates of his long since departed day of self-importance, called ‘a fine reader.’ Such instances of fame may serve to substantiate an assertion, that there is no art in which self-imposition is more conspicuous than in Elocution. Where there is no acknowledged rule of excellence, every one, whether cultivated or not, makes his own partialities or interests the standard. Having learned somewhere that it is the part of good reading to fulfil the designs of sense and sentiment, and as each one in his attempts, fulfils his own conception of an author, he fairly concludes that he possesses the full power of the art. Hence one reason why we find so much delusion on the subject of this accomplishment. For, reputed ‘good readers’ are often not merely



negatively deficient; they are frequently positively bad: and perverse as it may seem in the very teeth of the professed approbation of a majority, I have generally gone to learn the *faults* of speakers, when called to hear some star of elocution at the bar, in the senate, the pulpit, or the reading club. Loud noises, seem to have always been the delight of savages in their first step towards music; so the exaggerated and consequently striking character of the elements of speech, is always most agreeable to the uninstructed ear.

*Fifthly.* I illustrated, in the section on melody, the manner in which the transitions of pitch are made from one line, to another above or below it. Some persons find it difficult to shift the radical in this manner. This defect not only takes from the variety of utterance, but prevents a reader from passing from a very high or low pitch, when he has improperly set out in either. Speakers sometimes descend so far that they have not enough compass left, below the line of current melody, to permit an audible execution of the last constituent of the cadence. In this case they feel the feeble and unsatisfactory effect of their intonation, without perceiving the cause of it or being able to apply the remedy. A knowledge of the mode of melodial progression, and of the space through which the cadence descends, will enable the reader to avoid the fault here pointed out.

We noticed formerly the circumstance of a reader, with a good ear, having a sort of precursive perception of the falsette, sufficient to enable him to turn from it, when his melody is moving near the top of his natural voice. The same kind of anticipation of the lowest note, enables such a reader to keep his cadence within the limit of distinct articulation.

*Sixthly.* The use of the protracted radical and vanish, instead of the equable concrete, is one of the widest deviations from the characteristic of speech. For it has been shown that a proper melody, the diatonic as I have called it, consists of an equable movement through the interval of a second, with an agreeably varied radical-change through the same space: the current being occasionally broken by wider equable transitions, and by different modes of stress, according as the sentiments may require any of these additions upon individual words.

In as much as this fault is an error of long quantity, it is not

often heard in the hasty pronunciation of common life. I have however met with a slight degree of it in a phlegmatic drawler. Public speakers overwrought by excitement, or straining their throats to be heard, I say,—straining their throats, instead of *energizing their voices*, are most apt to fall into this error of intonation. Some of the cases of this fault that have fallen under my notice, were connected with a monotonous current melody, and a very defective management of the cadence. I heard it under the form of the protracted radical, along with other heinous offences against good elocution, in one of the public's 'great actors.' It was most conspicuous in his endeavour to give long quantity to immutable syllables; as in the following words of Macbeth.

Canst thou not m—inister to a m—ind diseased;  
Pl—uck from the m—emory, &c.

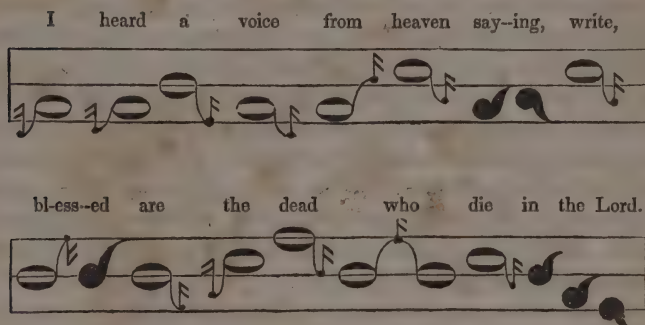
I have here set a dash after the letters on which he continued the protracted radical, until it suddenly vanished in the termination of the syllable. The actor's fault was a lapse from a just instinct. He felt obscurely the need of vocal quantity for the purpose of expression, but being one of those who having some animal spirits, with little intellect, no education, and an inverse proportion of vanity, are always talking about genius, he never once thought of such things, as marring the nature of an immutable syllable, nor of the practicability of leading a subtonic element through the equable concrete: matters that would long ago have been prepared for his instruction, if there had been in the dramatic art more observation and reflection, and less noisy foolishness about the stage doctrine of 'Identity' and of self-sufficient genius.

*Seventhly.* The fault of melody I am now about to consider, is somewhat related to that last described, in using the protracted notes. But it adds the other modes of intonation which in the second section were ascribed to song: the whole being confused in such a manner with the equable concrete, as to destroy every design of speech, and to exhibit the ultra example of vocal deformity.

In the history of man, there is nothing more indefinite than descriptions of the voice: but there is reason for believing that

this deformed melody is the same with that puritanical whine, which was affected so generally in religious worship, in England, above two hundred years ago. It has been changed into other faults scarcely less censurable, by the pulpit of the present day. The society of Friends alone have retained it as a general practice: and it will not be regarded as either idle or invidious, to look into the structure of this most remarkable intonation, by the light of our preceding analysis.

I shall first set down the notation of this melody, and afterwards particularly explain it.



I have under its several places, spoken of the minor third or plaintive interval of one tone and a half. A melody founded on a current of minor thirds, has that excessive or peculiar plaintiveness which forbids a repetition of its effect in speech. Now the above notation, is with a few exceptions a melody of minor thirds; and its unpleasant and monotonous whine is produced by the drift of that interval.

Upon this staff, let the third be minor. Then the first and second syllables are protracted vanishes upon a concrete minor third. 'A' and 'voice' are protracted radicals to a concrete descent of the same interval. 'From' is a protracted radical to the rising interval of a minor third. 'Heaven' is a minor third of the same elemental form with 'voice'. The two syllables of 'saying' are equable concretes, respectively, of an upward and downward tone. The rest severally resemble those already described; except 'who,'—which consists

of a protracted radical to a direct wave of the minor third, whose downward constituent terminates in a protracted vanish.

In the execution of this melody, there is not only the general effect of a monotonous song, but there are peculiar and striking contrasts, arising from the various effects of the changes among these different elements of intonation. The most extraordinary liberties are taken with quantity. The long, however, as necessary for the notes of song, predominates. There is here no distinction between immutable and indefinite syllables: the shortest are not only prolonged to any extent, as in 'write,' but they are divided as in 'voice,' which is apportioned to the two parts of its symbol, as if it were 'voy'-  
'iss'. I have introduced the equable concrete among the protracted notes, and have put the cadence into the diatonic form, to exemplify those abrupt and rousing changes of the whole nature of intonation, which are sometimes made at the pauses and close of this most fantastic melody. I have not exhibited all the varieties into which the above named elements, together with the tremor, and the wider intervals, are combined in it. But I have shown enough to furnish a plan for self-examination and amendment.

If those who are accustomed to this melody should ask—— why it may not be employed, if it is by habit agreeable, and revered by association with the occasions of its use? I answer, that——throwing aside taste, and regarding plain usefulness, it does not accomplish the attainable ends of speech. By speech we communicate our thoughts; and in the duties of religion, there are motives and zeal, to do it with the most forcible means of persuasion or argument. So far as the voice is concerned in these duties, its means lie principally in the energy and expression of emphasis. But by the mode of intonation in the remarkable melody now in view, the varying designs of emphasis are counteracted by the almost continued impression of a plaintive song; or are crossed in purpose by the unmeaning obtrusion of unexpected changes. How can the sentiments which dictate the encouraging descriptions of blessedness and glory be represented by the trembling voice of distress? How can the sober positiveness of truth, and the wonder at almighty power, which require the downward concrete, be enforced by the shrillness of a perpetual cry? How can we particularize the strong feeling of supplication,



if we equally employ its symbols in the threats of vengeance? And with what force can we represent interrogation, if the sharp vanishes, which are instinctively allotted to it, are often so unmeaningly playing in the voice?

Whoever regards the words of ordinary song, knows into what confusion emphasis is there thrown. It is not more clear or correct in the kind of melody we are now considering.

I have thus made the strongest representation of this fault. It is sometimes heard in a more moderate degree, especially in the voices of women; consisting of a slight protraction of the top of the vanish on all the long quantities of discourse.

This singing melody, as delivered in the public meeting-house, by men as well as women, is generally of a high or piercing pitch; this being the means of audibility usually employed by persons of uncultivated voice.

*Of Faults in the Cadence.* If I were to designate any parts of utterance as particularly liable to faults, they would be those of the radical succession of melody, and the cadence. Even the best readers do not seem to have fallen accidentally into all the attainable variety, in the execution of the current and close of discourse. But faults in the cadence are the most striking.

We can assign a cause for the frequent failures upon this point.

Whoever will attend to the course of the voice in the common dialogue of life, will perceive that the earnest interests of speech, the sharp replications and interruptions of argument, the inquisitiveness of idle curiosity, and the piercing pitch of mirth and anger exclude, in a great measure, the terminating repose of the cadence. This is particularly the case with children and the ignorant, who having no spring of action except interested curiosity and selfish passion, rarely exhibit any intonation besides that of the higher and more expressive intervals of the voice. When therefore a person first undertakes to read the discourse of others, the conversational habit is not at once laid aside: and it is apt to cleave long afterwards to speech.

Faults in the execution of the cadence are various: and if its total absence might be called a fault, I could cite an instance of a clergyman, whom I heard go through an address

of fifteen minutes without once making a cadence ; no, not even at his final period. The audience were notified to sit down, by his terminative Amen, not through the proper indication of the close by his voice.

But even those who have the ability to make a cadence, are infected by the next fault to be mentioned.

I described ten forms of the cadence. This was done as a philosophical analysis ; to point out distinctions which may be made by an accurate ear, and in reality executed by those who have flexibility of intonation. For the purposes of instructive rule, we may particularize the Feeble, the Duad, the Triad, and the Prepared cadences. These are quite sufficient for the ordinary purposes of reading ; and vocal skill can always effect an interchangeable variety of them, in the succession of periods. The next fault then consists in—— a repetition at every pause, of the same kind of cadence, and that generally a full one. This fault is increased by the common mode of punctuation, which often sets a period at places, where the voice should be only suspended by the phrase of the downward ditone.

I have heard a player of high character use what we formerly called a false cadence : that is, a descent of the third by radical change, the second constituent of the Triad being altogether omitted. This false cadence is sometimes made on a wider discrete interval ; the voice suddenly falling a fifth or even an octave, if the pitch has been high enough to allow these descents.

Some persons are in the habit of making the cadence in a low and almost inaudible pitch. I have said this arises from a want of that prospective reach of perception in the ear, which enables a reader to hit the precise place for his cadence. One who has not this skill, may indeed know that the period-pause is coming, and that therefore the voice should descend : but being ignorant at what point he ought to begin, in the fear of falling precipitately upon the close, he prepares for it too soon. A downward ditone is first made, and some instinct preventing him from adding the next tone below, by which the cadence would be completed before its time, he adds a monotone, and again tries a downward ditone. In this manner he descends, till with an enfeebled voice, the cadence is

made on the three final syllables. The process here described is not indeed continued through many words; most readers would in that case soon exhaust their pitch. Yet this does sometimes happen: for the voice by this shelving course is at last brought down to a whisper.

*Of Faults in the Third.* The third is properly employed in the moderate forms of interrogation and in conditional phrases. Some readers however execute the whole current melody in the rise of this interval: the emphatic words in this case being marked by some of the modes of stress on the third, or by a higher run to the fifth. There is a disagreeable sharpness in this melody. It wants force; for it abates by comparison the impressive character of the higher intervals when emphasis requires their introduction. I have heard persons with this fault try to read Milton and Shakspeare, and always without success. The current of dignified utterance must always consist of the wave of the second on the long quantities of discourse. No simple upward concrete can effect it: though the rise of a wide interval may be occasionally employed for emphasis in the gravest drift of the diatonic melody. A speaker who uses the third as his current concrete, feels the necessity of avoiding a simple rise; and therefore sometimes returns it downward into the form of the wave. This does not mend the effect, as we shall learn presently.

Another fault in the third, even when the whole current is not made by that interval, lies in forming all the emphases with it. This likewise gives a sharpness to speech, together with a monotony; for one of the causes of beauty in utterance consists in the variation of the kinds of emphasis: and we pointed out, in its proper place, the abundant means in the voice, for this variety.

The substitution of the third for the second in melody is principally offensive from its monotony. And the reader may recollect it was said in the section on Drift, that these higher intervals will not bear continued repetition.

*Of Faults in the Fifth.* The interval of the fifth is sometimes made the current concrete of melody: the peculiar effect of the intonation being most conspicuous in the emphatic places. It is a less frequent fault than the last, and is more commonly heard in women. It has a palpable monotony,



and a still greater sharpness than that of the third : the whole melody having the construction and effect of an interrogative sentence.

A less remarkable degree of this fault is that of a diatonic melody in which all the emphases are made by the fifth. This too has its sharpness and monotony; and I am sure the reader will be sufficiently guarded against this fault, by keeping in mind the ample resources of the voice for the production of varied emphasis.

Those who thus misplace the third and fifth, are apt to carry them into the cadence : such readers end many of their plain declarative sentences with the characteristic intonation of a question.

I might point out a similar error of place in the Octave : but it is of rare occurrence, and to be observed only in the piercing treble of female voices. Some persons can not ask a question in the subdued and dignified form of the third or fifth, but do it always in the keen or facetious intonation of the octave.

*Of Faults in the Downward Movement.* The faults mentioned throughout this section are found more or less among those who are called good readers. When instruction shall grow out of the philosophy of speech, instead of imitation, the defects of utterance, now so common as to require notice, will be confined, like the faults of grammar, to the uneducated part of the world. As far as I have observed, there are no very conspicuous errors from the abuse of the downward intervals. If the falling second should disproportionately predominate in the current melody, it will give a graveness to the utterance which may happen to be misplaced. The wider intervals do not often occur as faults: since it requires some skill to use them in their emphatic positiveness, and he who can thus execute them correctly, will not be likely to misapply them.

*Of Faults in the Discrete Movement.* Of defects in the management of the radical change of the second which forms the diatonic melody, we have already spoken. Precipitate falls of the third, fifth, and octave sometimes occur in the cadence of very bad readers. Others again are unable to effect those upward and downward radical transitions, by which accomplished readers produce some of the most striking features of emphasis.



*Of Faults in the Wave.* The reader must bear in mind that the wave of the second, both in its direct and inverted form, is dignified but plain in its character, and therefore admissible into the diatonic melody as a drift. But it is not so with the waves of higher intervals. They have their proper occasions as solitary emphasis; whereas the continued repetition of them becomes to the ear of good taste a disgusting fault. The form of the wave which is commonly affected by a certain puling class of readers, is that of the inverted-unequal, the voice descending through the second, and rising through the third or fifth. This fault is most remarkable in the reading of metrical composition; and it is probable that the bad habit with some, may have arisen from associations with tune which is generally united with verse. Persons who read in this way give a set melody to their lines; certain parts of each line, as far as the emphatic words will permit, having a prominent intonation of the wave.

There is much of every form of the wave in conversation: and the general spirit of daily dialogue often makes it appropriate there. But I have heard the colloquial twirl even exaggerated by an Actress of great temporary reputation. Her style consisted of a continual recurrence of identical sections of melody, composed principally of the wider forms of the equal and unequal wave: which showed indeed a vocal pertness, and a sort of vivid familiarity, that some called spirit, but which wanted the brilliant dignity of execution, that a performer of High Comedy owes to the author.

Some actors are prone to the use of the double wave. They make it the emphasis of every feeling, not with the intention indeed, but certainly with the event, to denote that they themselves have none. It is an impressive element, and is therefore often thoughtlessly introduced to give prominent effect and variety to melody. It has however, restrictively, its proper duty and place: and it should be remembered that there is a sneering petulance in its character, totally inconsistent with dignity.

There is nothing better calculated to show the importance of the plain ground of the diatonic melody in speech, than this abuse of the wave. It includes the effects of faults in the third and fifth, and consequently gives to discourse the most florid

and impressive character. But when such striking intonation is set on every important syllable,—how shall we mark emphatic words except by the utmost excesses in quality or time of force?

*Of Faults in the Melody of the Pause.* In the section on Pause, it was shown what phrases of melody were proper for connecting and for separating the ideas of discourse. Those who may hereafter look into this subject, will see the fitness of the allotment there made; and will moreover be struck with the violations of sense and variety so commonly heard among readers: some of whom set a rising third or fifth at most of the sub-pauses, and even at the period. A want of nicety too, in varying the kinds of cadence according to the fulness of the close is a very general fault: for there is great clearness given to style, by that delicacy of perception which leads a reader to put the feeble cadence at doubtful periods, and the prepared cadence at the end of a paragraph or chapter.

*Of Faults in Drift.* The variety and true spirit of reading are effected, by a delicate regard to the correspondence between sentiment and vocal expression, in individual words; and to the Drift or continuation of a given elemental character through one or more sentences: whereas a neglect of this adjustment, will, according to its degree, weaken the impression of utterance, or shock the ear and taste of an auditor. Some readers continue one style of voice through every change of thought and passion: others vary the character of the utterance without adapting it to the demands of sentiment.

Under the last head, we spoke of the power of the prepared cadence to indicate the termination of a paragraph or subject. Now certain changes in the structure of melody, which were formerly described, may be employed to warn an audience of the beginning of a paragraph or subject. The deficiency of a speaker on this point is a flagrant fault.

The object most worthy of remark in this place, is the sudden transition from one style of utterance to another without a corresponding change in the subject. I remember to have heard an actor set the house into a hum of laughter by making that answer of Jaffier to the conspirators—

Nay—by Heaven I'll do this,

in the curling quaintness of the wave. The sentiments of Jaffier, the solemnity of the juncture, the purpose of his entrance among the conspirators, are all at variance with the levity of the sneer, conveyed by this intonation. Severity of resolution, is Jaffier's sentiment ; and this calls for some of the energies of stress, and the positiveness of the downward emphasis. I have tried in vain to make a term to designate those outrageous transitions, sometimes heard on the stage. They belong to the head of the faults of Drift : but we must speak of them as 'deeds without a name.' What I mean is,—those abrupt changes from high to low ;—from a roar to a whisper ;—from quick to slow ;—harsh to soft ;—from the diatonic melody to the chromatic ;—from the gravity of long quantity to the levity of sneer, the quick stress of anger and mirth, or the rapid mutterings of a madman.

There are two different defences may be set up for a particular mode of Elocution. The one, that it is a copy from nature : the other, that it does artificially best answer the ends of speech. I can not derive an apology for such flagitious transitions, from either of these sources. I have seen persons under the highest excitement of passion, and changing from one degree and kind of feeling to another ; but I have never heard any thing like the harlequin-transformations of voice, which are sometimes played off upon the stage, except in a paroxysm of hysteria. On the other hand, suppose the practice to be an artificial system, (to which I would make no objection, provided it fulfilled all wise and fair ends)—what recommendation on the score of order can that plan boast, which annuls all the beauty and frugality of rule, which destroys by its anomaly and abruptness all the pleasures of anticipation, and takes from the fine arts, the delight in boundless association, which arises from the busy exercise of well-established knowledge.

The truth is, that where this fault does not arise from ignorance, it is purposely assumed with the view to produce what the small vocabulary of dramatic criticism, calls 'Effect.' The actor finding himself deficient in variety, and in that complete finish of expression, which drowns scrutiny in approbation, tries to remedy his poverty by breaking through the even tenor of the part, with some rousing stimulus or unexpected collapse. We must however do some actors the justice to be-



lieve that they have too true an estimate both of nature and art, to approve of such things. But how shall we absolve them from the charge of submitting to what they know to be ill-judged applause; and of being 'willing to deceive the people because they will be deceived,'—the easy art and resource of weakness, and the wretched apology of knavery and ambition. It is the part of elevated intellect to undeceive the world even by unwelcome truths; to make all men at last bow down; and to be the master, instead of the slave of opinion.

We need not specify the faults which fall within the subject of grouping. Errors in the connexion or separation of ideas in discourse belong rather to the mind than to the voice.

*Of Monotony of Voice.* This is an old term in elocution: but it is here used with a more extensive signification than formerly. It means, in general, the undue continuation of any function of the voice.

The investigation of this subject may furnish some support to the doctrine of expression laid down in this essay. For since I have asserted that correct and varied speech is effected by a certain composition of the vocal elements, it will afford no little countenance to this proposed system, if it be found that the transgression of its rules, as far as regards the limited use of these elements, is productive of the palling impression of monotony.

One can scarcely point out an occasion, on which the simple rise of the second, or the diatonic wave has this effect: for according to our system these are properly the most frequent movements in discourse. The employment of the second in place of other functions, may sometimes produce an error in expression, but we do not call it monotony. The chromatic melody, though a continuation of the impressive interval of the semitone, is not monotonous, if the sentiment is suited to its plaintiveness: but many of the other elements when spread over discourse offend by this fault. Thus a repeated succession of the same phrases in the current melody; the same kind of cadence, particularly if it frequently occurs; the successive use of the downward second in melody; a melody formed on the third or fifth; a restriction of emphasis to the third or fifth or octave; a constant use of the accent and emphasis of the radical stress; the vanishing stress; the tremor; the down-



ward wider intervals ; too free a use of distant skips in the radical change, both in the current and in the cadence ; the higher waves ; and the protracted notes of song may each become the basis of monotony. In short it may be worth repeating in this place, that all those elements which nature has allotted to the rare occasions of emphasis seem to be protected against abuse, by the occurrence of monotony whenever their purpose is perverted by an undue repetition.

*Of Ranting in Speech.* This fault consists in the excess of certain elements. These are loudness ; violence in the radical and vanishing stresses ; and in general, an overdoing of the expression of any sentiments, when united with force.

*Of Affectation in Speech.* This consists simply in a misapplication of the functions of the voice, whatever may be the system assumed as the standard of purity and excellence in the art.

*Of Mouthing in Speech.* This belongs properly to the head of the faults of articulation, or deviations from standard pronunciation ; of which it is not my intention to speak particularly.

Mouthing consists in the improper employment of the lips in utterance.

Some of the tonic elements, and one of the subtonics are made by the assistance of the lips. They are 'o-we,' 'oo-ze,' 'ou-r,' and 'm.' When these abound in speech it is apt to lead to this *Omega-ism* ; if mouthing, may be so called, from the letter which usually exhibits it. All the other subtonics may be, to a degree, infected with this fault. It slightly infuses the sound of the 'o-we' or 'oo-ze' into their vocality : for the protrusion of the lips, gives something of this character even to a lingual element. Mouthing may be called a mode of affectation.

I might here give a particular description of the voices of Childhood and of Age : for these may be looked upon as faults, when compared with the full-formed, vigorous and varied utterance of intermediate periods. The analysis which has been given will enable an observant reader to discover their characteristics. He will find the voice of childhood to be high in pitch ; monotonous in melody, defective in cadence, the intonation often chromatic, and highly colored by the wider

intervals and by the wave. He will find old age to be slow, with frequent pauses, slight radical stress, and tremor.

I have thus described many of the faults of speakers in their single state, under the several heads of the individual elements. They are compounded by bad speakers, into all possible numbers and forms. The permutations would defy every attempt towards a useful classification: I therefore leave the contemplation of the subject as a task for the reader.

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Here I finish the history of the Speaking voice. It has been my design throughout this work to subject nature to a prying examination; to measure her by the simple but rigid rule of the senses; and to unfold her mysteries with comprehensive arrangement and philosophic precision. How far these points have been accomplished, the intelligent reader must determine, with that allowance for minor errors which the historian of nature has a right to claim, and which the liberal critic will not refuse.

Those to whom the subject of Elocution, in its higher meaning, is new, will receive this history without prejudice; and though they may not have occasion to lay up its practical rules, will still admire the beautiful economy of nature, in the structure of speech. Those who have spent a life of labour, by the little light which has as yet been set up in the art, and who are too old or proud or dull to take on a new mind, with the advancement of knowledge, will at least learn from this essay the deficiencies of the old schemes of analysis and instruction, even though they may not admit that these deficiencies are here supplied. If the development now offered, were the mere improvement of an art, persons of this last class might be able to discover traces of their former opinions, and thereby have reason for admitting it. But finding here a new creation, they may reject it altogether, because they can not recognize the fulfilment of some fancied plan of a science, which they had named but never knew.

However philosophy may admire the beauty of nature in this scheme of the human voice, it must be regarded as a curiosity only, if it does not lead to some practical application.

I have therefore joined with the physiological analysis, a consideration of the means for facilitating instruction, and for improving the art. We have learned the plain diatonic sign of thought, and the more impressive voices of expression. We have seen how speech may be dignified without being dull, and plaintive without exhibiting the affectation of a whine : how it may be full in quality and graceful in its vanishing construction : how its measurable movements may be adjusted to the pauses of discourse : and how definitely all the modes of emphasis may be ascertained.

If we were to draw an inference from the conceits and practice of mankind, we would believe that the modes of a good elocution are endless ; for every one with peculiar self-satisfaction thinks he reads well, and yet all read differently. There is however but one mode of reading well : and I have endeavoured upon the warrant of analysis, to lay down the plan of a system which may be hereafter adopted and completed. The principles on the subject of intonation have been drawn partly from the best practice of the Stage ; partly from the almost infinite variety of common speech ; and partly from a consideration of the suitableness of the various fashions of Elocution, and a selection from them, which promises to be the most effective in operation, and the most durably pleasing to a cultivated ear.

Without some established principles in intonation, there can be none of that fellowship in opinion which so powerfully assists in the advancement of an art. For though nature would seem to have fixed certain sounds as symbols of thought, still the differences in practice tend to confound her ordination and weaken her authority. If the subject of the human voice be thoroughly examined, and some system be established thereon, it will beget a similarity of opinion and practice, and consequently greater precision in the use of its signs : for the modes of intonation, like words, will have most force, when most common, and when not weakened by contradictory meanings.

In collecting and framing the precepts of Elocution, I have taken into view both the strength and the beauty of expression. The system represents corrected and dignified nature, under that form of severe simplicity, which is not at first alluring to him who is unaccustomed to look into the resources and effects



of the arts. The art of reading, thus established, will be found to possess an excellence, which must grow into sure and irreversible favor, whenever it receives that studious attention which serves to raise the pursuits of the wise above those of the vulgar. It would be too trite to tell the whole story of the great painter, who with his mind full of fancies on the powers of Raffaele, was disappointed at his first sight of the walls of the Vatican, and disconsolate after his last.

The florid style of elocution, which consists in a melody formed upon other elements than those of the diatonic, is founded on that ignorance and that sway of imagination and passion which prevail with the child and the savage. The same temper of taste which calls for the florid manner in speech, demands a perpetual change in it; and capricious alteration takes the place of enduring improvement. The system of plain melody and contrasted expression for which I would plead, partakes of that simplicity which an advance in the arts always produces.

If this scheme of Elocution should, on the grounds of propriety or taste, be objectionable, let another be formed by him who is better qualified for the task. Only, let a system be formed. And whilst in other arts we can turn to the imagined forms of an 'Apollo,' a 'Transfiguration', and a Doric facade, and to the humanly-associated compositions of the Oratorio and the Landscape—let Elocution be able hereafter, not only to bring forward the names of Roscius, Garrick, Siddons and Talma, but let it lay up in the cabinet of the arts, a description of their works, and a record of the principles upon which they were executed. In short, let the art of speaking-well be invested with that corporate capacity, by the preservative succession of which the influence of its highest masters shall never die.

The true spirit of fellowship among the votaries of the arts, and the bad temper of disagreement, turns so entirely on their identity of opinion, that any one who has examined this subject, would prefer an institute which almost abandons the line of nature, as a substitute for the varying and contradictory rules which the individuals of nature would constantly suggest.

The scholar whose study lies among languages, estimates those which have received their systematic form from the arbitrary institutions of grammar and prosody, above those



which spring naturally from the wants and passions of uncultivated society.

Where shall we find the natural prototype of Heraldry, which makes the enthusiast, over his armorial ensigns, delight in the purely invented system of the Escutcheon and its Charges, and watch their disposition by all the rules of blazonry?

What book of Botany can designate that leaf and stem which forms the floral scroll, the symmetric lotus, the acanthus, and the varied cup which constitute the beautiful and endless combination or ornament in Ideal Foliage? To the cultivated eye, the chosen productions of the garden are meagre and ungraceful, beside the rich windings and leafing and tracery on the frieze of the *Frontispiece of Nero*.

These three subjects are all the systematic creations of art; and it would seem that objects of intellectual as well as of physical taste are more satisfactory, when enjoyed through acquired appetite and approbation.

Without some system of principles, either natural or conventional, I am at a loss to know on what criticism in Elocution is to be founded. Its rules have too frequently been drawn from the very works which are to be the subject of investigation. Garrick is to be tried; and by the common law, for there is no statute here, the former case of Garrick is the rule of judgment. Happy for an art, when such authority can be cited! But what is to be said when presumption pushes itself into the front ranks of elocution, and thoughtless friends undertake to support it? The fraud must go on, till presumption quarrels, as often happens, with its own friends or with itself, and thus dissolves the spell of its merits.

The preceding analysis contains elements of criticism, and makes some effort towards their application. Pronunciation, pause and emphasis are the only points of elocution which critics have ever brought to the precision of particulars: and on these only have they been able to show any thing like definite censure or applause. By turning our attention to the details of Intonation, we have yet to learn how far emphasis depends upon it: and when a perception of the multiplied functions of speech is awakened by analysis and nomenclature, we will then first perceive how the designs of emphasis, in

the full acceptation of the term, may be marred by defects in the delicate schemes of melody and intonated expression.

Look at a formal review of dramatic performance ; you will find in it, words enough, and very good grammar. You can not however avoid observing a strong disposition on the part of the writer, to say something, when he has nothing to say : hence after exhausting a small vocabulary of unmeaning or most general terms, sometimes misapplied and always mawkish to a delicate taste, such as ‘chasteness,’ ‘by-play,’ ‘undertone,’ ‘freshness,’ ‘harmony,’ ‘effect’ and ‘keeping.’ —I say, after hurrying over these indefinites, the writer soon **makes** his way to surer ground, —in noting the number and dress of the audience ; the comfort of the seats in the orchestra ; the bad taste of the stage side-doors, with thanks to the manager, or censure, for the good or bad effect of recent alterations in the shape or the rules of the house ; the habit of slamming doors ; the noise of iron-shod boots : copious extracts from some of Shakspeare’s best-known scenes, and a reprint of one of Cumberland’s criticisms.

The preceding essay furnishes principles and definite terms by which the specific merits and defects of an actor or a speaker may be distinctly represented ; by which the indescribable mysteries of speech, as they are called, may be told to other ages than those that heard them ; by which arrogance and imposture in this art, may be wrested from their hold on the better part of mankind, and their rule left undisturbed over that great majority which is always ready to support the small frauds of life, and which, in its way, does receive a sort of pleasure from the changing pictures of its credulity.

The same acute and comprehensive observation which makes an interpreter of nature, makes a prophet in the arts. He can tell us, that in the future history of elocution, as it now is with song, —the masters of its practice must always be masters of the science : that they will, with the confident aim of principles, address themselves to ~~the~~ elect of intelligence and taste, by whom their merits will be rated and their authority fixed. And if in making a fame or fortune by their voice, they should receive any assistance from this essay, I shall be contented to think it is some contribution to the mul-

tiplied means, by which the works of art are made to be eternally delightful to mankind.

Finally, I would recommend this analysis, and the practical inferences which have been drawn from it, to those who declare with contra-distinguishing ascription, that elocution can not be taught, but must be the work of genius alone. Such persons look upon the powers of the mind as a kind of sleight: the ways and means of which are unknown and immeasurable. But genius, as far as it appears from its works, is only an aptitude for that deep, wide and exclusive attention which perceives and accomplishes more than is done without it; and therefore is not altogether removed beyond the reach of rules: though in its course of instruction, genius is oftenest the pupil of itself.

Let those who are deluded by this mystic notion of genius turn their eyes from impostors who can not define an attribute which they do not comprehend; let them look to the great Sachems of mankind, and learn from the real possessors of it, how much of its manner may be described. They will tell us that genius, in its high meaning, is always enthusiastic:—always characterized by passionate perseverance; by the love of an object in its means as well as its end; by that unshaken confidence in its own powers, which converts the evils of discouragement into the benefits of success; which cares not to be alone, and is too much engrossed with its own truths to be disturbed by the opinions of others:—with a disentangling spirit, to see things as they might be; and an economy of purpose, to execute them as they ought to be; soaring above that musty policy which, in its wary tact of the expedient, would with a world-serving quietude preserve them always as they are:—having the power to accomplish great and useful works, only because it wastes no time on small and selfish ones; and passing a life of warfare in detecting the impostures and follies of its own age, that the next, like the consulted Oracle of Delphi, may pronounce it the chief in wisdom and in virtue.





A

BRIEF ANALYSIS

OF

SONG AND RECITATIVE.

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WHEN the phenomena of Speech, Song and Recitative, are regarded independently of verbal distinctions, they display a nearer resemblance than is discoverable by a general view of their effects and names. It is the duty of philosophy to look into the real existences of things; to break down many of those lines of separation which the poor conveniences of classification have established; to exhibit, as far as is available with finite resources, that clear and comprehensive picture of nature which is surveyed, at once and always, by the infinite discernment of her author himself.

To the common ear, speech and song are totally different. Let us examine their relationships by an analytic comparison of their several constituents.

In taking up this subject, I have no new function to represent. Song and Recitative are only certain combinations of the five accidents of sound which were minutely described in the preceding part of this volume. It is my design to point out the method of these combinations; in order to complete the survey of vocal science, by showing the similarity between the phenomena of its three leading divisions.

## OF SONG.

THE art of Vocal Music has long been studiously cultivated; and although it has never yet received a strict elemental analysis, its professors have accumulated a mass of observation, and framed a body of principles for governing the great and brilliant results of their practical execution.

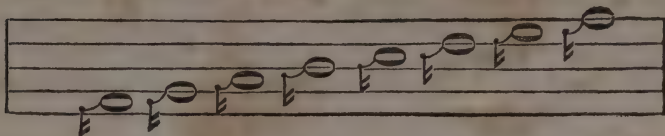
It is, at this time, beyond both my design and ability to offer any thing like a detailed consideration of the topic before us. The opportunities for inquiry on the subject of Song, as well as on that of all the Fine Arts, are too limited in this country, both as regards the higher discussions of taste and the eminent examples of executive skill, to furnish any proposed record, in that order and with that clearness and strength which always characterize a direct transcript from nature. It becomes the American, in knowing himself on these matters, to touch those points only, which the physiology of his own organs may furnish, and, in this day at least, to leave the full description of all that the singing voice can do, to the ample means of European experience and education. I propose to give only a general account of the functions of song; leaving it to those whom it may professionally concern to make any practical application of the principles here developed, or to pass them by as a part of natural history that is more curious than useful.

As song consists in certain combinations of the five accidents which were made the ground of arrangement in speech, I shall give the proposed analysis under the same general heads: and first,

*Of the Pitch of Song.* The movement of song has every direction and extent which was ascribed to speech, together with two forms of intonation, which do not belong to the latter.

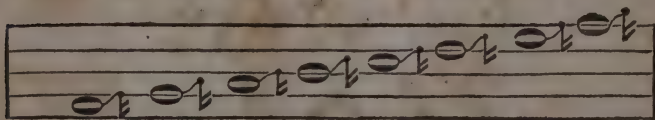
In illustrating the nature of the equable concrete I described the Protracted Vanish. When given as a single unimpassioned effort, it consists of a rapid concrete-rise through the interval of a tone, and a prolongation in one line of pitch at the summit of that tone. If the reader will allow me to designate these parts, by calling the rapid concrete-rise the *Arsis*, and the level line the *Note*, it will contribute to the brevity and perspicuity of our future description.

When we rise by the protracted vanish, through the seven places of the musical scale, the movement is made according to the following notation of time and pitch : in which I suppose the succession to be on the staff of the bass-cliff.



But song likewise employs the Protracted Radical, though perhaps less frequently than the vanish : for if I do not mistake, the voice in its instinctive intonation, more readily falls into the protracted form of the latter. Not having however sufficiently examined this matter, I leave it for future inquirers. As far as regards the vocal effect or expression of these two forms of the protracted note, I can perceive no difference between them : and should no better reason be found for a singer's choice in taking one or the other, I would suggest, that it may perhaps, in some cases, be decided by the nature of the elements on which it is executed. Thus the diphthongs 'a-we,' 'a-h,' and 'ou-t,' have more volume and audible character, than their respective vanishes 'e-rr' and 'oo-ze.' Hence we may understand why a singer, having reference to the impressive effect of a long-drawn note, would prefer employing the protracted radical of these, and the like compounded elements.

The following is the notation of the scale of the Protracted Radical.



The time of the arsis in the foregoing scales, is here represented by a semiquaver, and that of the note by a semibreve,

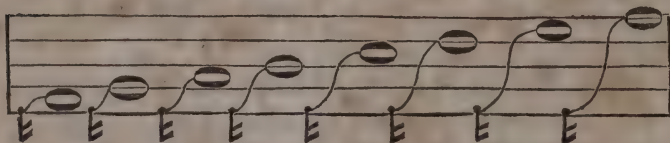
two comparative terms in music which hold the proportion of one to sixteen.

There may be a simple and a more complex structure of song: formed, as we shall see, respectively by the discrete and concrete movements of the voice.

As the successions of pitch in the preceding scales, are made by a transition either to proximate or remote degrees, without the continuous slide from one degree to another, a vocal melody founded on these scales, may be called—Discrete-Song.

In this kind of melody, the length of the note, when compared with the arsis, is different, according to the requisitions of time in the air to which it is sung. Its longest quantity may exceed the proportion represented in the above scales. Its shortest, changes the movements to an equable concrete, the voice becoming altogether arsis by the obliteration of the note.

The foregoing is the most simple form of pitch. The next is that of an arsis of greater extent than a tone. In this way several different representations of the scale might be given, consisting respectively of the rapid rise of a third, of a fourth, fifth, and all other intervals with a protracted radical or vanish severally connected with them. Let the reader by the example of the above scales draw for himself a similar rising progression with the arsis of a third, then another of the fourth, and so on through the whole compass of the voice: as in the following notation of the scale, where the arsis, with its protracted vanish, is represented in all the intervals, from a second to a ninth.

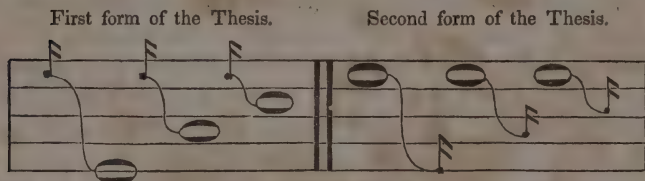


Now if we take this diagram, with the page inverted, we shall have the notation of a protracted radical with an issuing concrete of the several intervals of the scale. There are then two forms of the rising movement in song, one in which the arsis, or concrete of every interval, ascends from a protracted



radical: and the other in which it rises to a protracted vanish. But song likewise employs the downward concrete in connexion with the protracted notes, and of these movements there are two forms.

The first descends by the concrete, and terminates in the protracted note. The second, on the contrary begins with the protracted note, and then descends by the concrete:—as in the following illustration; in which I have called this downward concrete—The Thesis.



Thus there are in song two forms of the Arsis, and two of the Thesis: arising out of the connexion of the concrete of every interval with the protracted notes: and what was remarked concerning the length of the note, in the scale of the second, may be said of all the others with their different intervals of the Arsis and Thesis,—that the proportion between the note and the concrete so varies that the former sometimes disappears altogether, and the movement, becomes like the equable concrete of the rising and falling intervals of speech.

Let us suppose this last form of the arsis and thesis, without the appendage of the note, to be united into one continuous movement. This produces in song the element called the Wave: and in as much as we have an arsis and thesis of every interval, so they may be combined into every form of the wave.

There are also continued movements, in which the waves of every interval, whether direct or inverted, may begin with a protracted note or end with it; or have it at both the extremes.

Song likewise employs the Tremulous scale upon the protracted note, the arsis, thesis, and wave.

As regards its pitch then, song may be classed under two divisions, First:

Discrete-Song, as we called the progression of a melody formed entirely of the protracted radical or vanish, with the arsis of a second or tone. Secondly, what we here call——

Concrete-Song, consisting of a continuous movement through the wider intervals, both in an upward and downward direction; mingled with protracted notes, and the various forms of the wave.

This is the proper place to consider the subject of articulation in song, since it is the management of pitch which secures the distinctness of this function.

I showed that one of the requisites for accurate pronunciation in speech, is an equal apportionment of the concrete to the literal elements. The audibility of the words in song depends in part upon the same principle: for the peculiar nature of the protracted note of pitch does not alter the mode of syllabication. The correct articulation of song however requires a further attention to the accentuation of words, and to their syllabic quantity. But the adjustment of these matters lies with the composer and the poet.

Writers on vocal science have extensively treated this subject: yet the same preceptive page which enjoins its importance, directs that the vowels should principally compose the strain of utterance. The vowel or tonic sounds have clearly the purest quality for song: but it is also certain, that a syllable is known only through the perception of its proper accent, and the allotted time of each of its elements. I have no more to say on this point than that the purposes in these cases seem to be at variance. It is the vocalist's duty to reconcile them, by making distinct articulation agreeable.

These are the general functions of song as regards Pitch. The manner of using them, and their junction with other accidents will be described hereafter.\*

\* Upon a review of our analysis of the intonation of speech and song, it seemed to me that the effect of the discrete scale of the latter might be produced on some musical instruments. The publication of this essay rather before the contemplated period, prevented me from testing the practicability of some imagined contrivances for this purpose.

I had designed to connect a square organ-pipe with its finger-key, by means of compound levers, so that the same touch which raises the wind-valve should, at a succeeding moment, raise a shutter on one side of the pipe at its open end; the object of this shutter being to cover an oblong aperture, reaching from the very

*Of the Time of Song.* I consider this accident only in relation to the individual functions, and not to the general construction of melody, and its rythmus.

Time is used in every degree of duration, on the note, on the arsis and thesis, and on the wave. When it is so short on these, as to exclude the note, the effect, as far as regards mere individual acts of intonation, does not differ from that of speech.

*Of the Quality of Voice in Song.* The kind of sound is the same in song as in speech. But since the time of the for-

end of the pipe, so far towards its sounding-lips, as to raise the pitch a tone or second when the shutter should be removed.

Now this shutter having its centre of motion towards the sounding-lips, was to overlap the edges of the oblong vent: but the plug which was to shut into the vent, with a rebate, was to be wedge-shaped, with its sharp angle towards the end of the pipe; so that as the shutter should be raised and consequently the wedge, as the under part of it, the vent would be gradually opened, and the intonation be thus made to ascend with a concrete movement. When the shutter should be entirely opened, the long note then produced, immediately following the concrete, might give the instrumental execution of the protracted radical.

In the transitions of melody with such a contrivance, it would be necessary that the valve in the wind-chest should be made to close before the shutter, otherwise the gradual descent of it, would make a falling concrete or thesis, on every note.

I have thus suggested the principle on which an experiment may be tried by those who have ability, time and convenience for such works: and there are other ways which persons of mechanical cleverness may contrive, for producing the concrete movement on a sounding-pipe either of metal or wood.

I am not altogether convinced that this mode of mechanism might not be connected with the vox-humana stop of an organ, or even the ventages of a bassoon. If this is practicable, it may give to instruments a little more of the character of the singing voice than they at present possess.

I can not say how much further the principle might be applied, for adding the wider ranges of the concrete, by a vent of greater dimensions in the pipe. The mechanism even for the Second would not be simple, and the management of more than one concrete-key, if I may so call it, might be beyond the dexterity of the player. What could be done on barrel-organs, machinists can best tell.

Automaton Figures have been made to speak, as it is called; but it is in a protracted note which produces song. Would not the imitation of speech be nearer, if the sound were by its instrumental cause, formed into the equable concrete?

On the whole, I shall be sorry if any one should lose his labour by a vain working at this problem. It is not the odd ends of time that ever did any thing well: and if the schemer should be disposed to devote one useful day to the hazards of mechanical ingenuity, in such matters as I have here proposed, let him take, at the same time from me,—the words of caution.



mer is generally longer and consists of the protracted vocality of the tonics, it renders the quality more conspicuous, and subjects it to more rigorous scrutiny. There are harsh, full, slender and nasal voices, and that which is called in the language of the schools, Pure Tone. This subject is however so well known in the practical discriminations of singers, that it needs no further consideration here.

There is a curious subject of physiological inquiry, connected equally with song and speech, but which I have reserved for this place.

It is known that with a few trials, all the tonic and most of the other elements may be made individually by the act of Inspiration. The quality is indeed strangely altered from the customary mode of the speaker, but the characteristic sound is complete. It would seem then that the vocal functions are equally practicable both in the ebb and flow of respiration : but for some wise purpose, the former has been universally appointed to carry out the continued current of speech. Now the cause of inspiration admitting only of a single word, or at most three or four, is like that which creates the difficulty with infants, upon their first essays in expired speech.—We have not the Holding-breath, as I presumed to call it, and therefore the act of inspiration immediately fills the lungs, reversely as the Exhausting breath drains them, and thus cuts off the course of speech.

The question I here put is,—whether by a practice as long and assiduous as that which gives a command over the time of expiration, the same holding breath might not be attained in inspiration ; and, should the quality of this entering voice, if I may so call it, be improvable,—whether it might not be employed in the purposes of singing, to aid in sustaining the voice indefinitely ; and for insuring a continuous intonation in the higher intricacies of execution. It is certain that this power has been attained in whistling, both as regards the quality of shrillness, and the accuracy of tune : and though in this case, the management of the holding-breath of expiration, far surpasses that of inspiration, still, the pauses for inhaling may be rendered almost imperceptible, through the controlling power that does exist.

*Of Force of Voice in Song.* This accident has reference



either to the general drift of the voice, or to its individual movements. I shall consider it only in the latter relation.

All the modes of stress formerly ascribed to speech are found in song. This is true not only as regards the equable concrete, which I said is sometimes used in the short impulses of the singing voice: but the radical, the median, and the vanishing forms of force are applied upon the proper arsis and thesis, when connected with a protracted note, and upon every course and extent of the wave.

The full and abrupt radical being always preceded by an occlusion, it may have a place at the outset of all the forms of the arsis, and thesis, and of the protracted radical, when it is found in song, or at the opening of the note which is represented in the scheme of the second form of the thesis. That note which is continuous with the rising or falling concrete can not receive this mode of force.

The greater duration of time which may be allotted to the upward and downward concrete, and the protracted notes, beyond what is allowable in speech, gives rise to a modification of the median stress or swell which does not belong to the syllabic concrete of discourse: for two or three of these swells may be set on the same note; that is, the force may diminish and revive alternately. The median stress may also in a protracted quantity, exhibit a structure resembling the radical and the vanish, by suddenly enlarging and gradually diminishing, and by the reverse.

The vanishing stress is principally set on the equable concrete, which makes the short syllabic intonation of comic songs.

But the most striking function of force consists in the use of the compound stress.

I have just shown that the voice passes through every interval of pitch, both in the arsis and thesis, and their union in the wave. This is done by a gliding movement, similar to the proper concrete of speech. But the transition may be otherwise made, by a rapid flight through the scale, in which its proximate places are distinctly marked. This, in the language of the school, is called 'running the gammut' or 'running divisions.' It is one of the most difficult executions of the art, and is never done with precision, speed, and clear ar-

tication, except by the persons of the highest skill. The description of this process will show the nature of the Trill or Shake, for this, and the movement called a Division, are but varied applications of the same physiological function.

The shake is a rapid iteration of two impulses of sound at the distance of a tone or semitone : or in other words, it is an alternation of proximate degrees on the diatonic scale. I have shown that every vocal effort consists of a radical and vanish ; consequently when two successive impulses occur on the same or on different degrees of pitch, each must exhibit these essential portions of the concrete ; but as the radical is the abrupt opening of the voice after an occlusion, there must be a pause of a moment at least between these two impulses or concretes.

The shake being a rapid iteration of sounds, without a perceptible interruption, can not be made upon a series of impulses, each of which has its radical and vanish : for if the reader will try to execute a trill on the diphthong ‘*a-le*,’ he will find he can not be sufficiently rapid when he makes the first sound of ‘*a-le*’ the beginning of the several successive impulses.

The only mode in which this rapid alternation can be effected, is by the compound stress. For should the top of the concrete be enforced to an equality with the radical portion, two impressive sounds at the distance of a tone or semitone will be produced ; there will be a smooth transition from one to the other, and immediately after each of the vanishing constituents of the shake, the radical will be ready to take on its function ; and thus to attain that velocity which is impracticable when the impression is made by the stress of successive radicals alone. If the reader will perform a trill on the element ‘*a-le*,’ he will perceive an iteration of the radical ‘*a*’ and the vanish ‘*e*’ of this diphthongal tonic.

Thus the shake is only a rapid execution of the compound stress of speech, upon a continued phrase of the monotone : and it is the manner in which the two stresses are joined by the concrete, that produces the smoothness or ‘liquidity,’ as it is called, of this vocal ornament.

As the compound stress was shown to be practicable on every interval of speech, so a shake in song might be composed of a rapid iteration of the compound stress, between other points of the scale : and indeed such movements are

sometimes heard in the tricks of the Florid Song ; but they are not technically classed with the trill, for this is restricted to the order of proximate degrees.

Let us now suppose the singer to pass upward or downward through the eight notes of the gammut, in the most rapid manner. All that was said of the alternate impulses in the shake, is true of this case : for when each of the eight points of the scale is marked by a proper radical, the same momentary delay from the occlusion must take place. Thus let the reader pass over several degrees, by giving the radical of the diphthong 'a-le' on each point, and he will find it difficult to run through the scale with rapidity if he does not employ the tremor. But when he utters the two constituents of the diphthong alternately, the 'a' and 'e' will be heard in quick transition through its proximate places.

Thus it appears that what are called 'Divisions' in song, are only the compound stress of the concrete, or an alternate radical and vanish, in the rising or falling succession of the scale.

There are various modes in which these divisions may be run ; for the whole octave may be passed through in one continued chain of upward or downward movement ; or the progress may be less extensive ; or it may be made by groups of two or three or four impulses with a pause between the aggregates. In short, the compass may be traversed in numberless ways, by the tune and time and mode of succession of this function. Sometimes a division is made by the proximate step of a semitone : but whatever the movements may be, they are all performed on the principle of the compound stress.

I asked myself in the course of this investigation, and I dare say the reader will make the inquiry—how it happens that the mode of execution by the compound stress, avoids the difficulty of that occlusion which prevents a rapid shake from being formed by successive radicals. I am not able to answer this question : and can only offer the following conjectures, which I beg the reader to take as such, without classing them with that certainty of observation which has been the rule of philosophy in this work.

It is possible that the organic cause of intonation is so constituted, that the radical must necessarily be followed by the vanish, before the structure can assume the position for another



radical. If then a stress, equal to that of the radical, can be made on the vanish, the purpose of the shake is gained without incurring a loss of time by the natural vanish ; and the organs will be ready to take on an occlusion for a new radical at the moment of the expiration of the vanishing stress.

We may suppose the shake to be made in another way, — by the voice traversing in a Continued wave between the extremes of a tone, and by a sudden swell of force at those extremes.

I need scarcely tell the reader that the proper trill is not made like the iterated Tittles of the tremulous scale.

*Of the Modes of Melody in Song.* Having described the forms of pitch, time and stress, we may now take a general view of their combinations.

The structure of melody exhibits every variety in the number of its constituents, and in their interchangeable union, from the use of the protracted note with the almost imperceptible arsis of a second, which we call the Discrete-song, to that utmost employment of the concrete pitch, and the compound stress which constitutes the ‘airs of agility’ or ‘florid execution.’ I have indeed made a distinction between these modes of movement ; but this serves merely to mark the extremes of a varied process, since song is scarcely ever heard in the rigidly discrete form, and when once the concrete movement of higher intervals than the second is admitted, no definite line of separation can be drawn between the execution of this still simple condition, and its more complicated structure.

In general terms then, and without pretending to describe the confines of each, I would call the Discrete-melody that which moves by proximate degrees and by skips, under that form of intonation which is represented by the two first scales of the protracted radical and vanish : and showing occasionally, because it can scarcely be avoided, a concrete junction of some of the wider intervals by the arsis and thesis. This is the mode of song used by the Church, when the choir is conducted by the congregation. It is suited to the general ability of the whole, and resembles the mere instrumental effect of the organ which accompanies it.

I would call the Concrete-melody, that disposition of the note, together with its varied connexion with the arsis and



thesis and the compound stress, which constitutes within due bounds of combination, the expressive powers of song ; and in its higher condition, the extraordinary but unmeaning flights of the most elaborate composition.

*Of the Expression of Song.* Expression in song is the power of exciting certain intense feelings by means of the pitch, time, force, quality and abruptness of sound.

It appears from this definition that the materials of expression in song are the same as those of speech : though some difference will be found in the special employment of them in the two cases. The Italians, who have taught us almost every thing in music, have divided their song according to the style of its execution ; the places in which it is displayed ; and the sentiments it expresses. I am only hinting at an arrangement upon the points of its rudimental functions.

In a general view of the subject of expression, we find that the dignity of Song is produced by the same fulness in quality, length of time, and gravity in pitch, which give an elevated and solemn character to reading. There can be no grandeur in that melody which employs the reverse of these conditions.

The gay efforts of song, on the contrary, like the sprightly method of discourse, are made by a sharper quality ; a quicker time ; a higher course of pitch, and a greater variety in its successions. The Aria Buffa or the Comic Song, generally consists of such short quantities, that most of its syllabic impulses are made in the true equable concrete of speech. Independently of its measure, the only reason why in some cases we know it to be song, is because the concrete and the radical pitch consist of wider intervals than belong to the current of speech.

The plaintive effect of the semitone, and the minor third, which is only a peculiar position of the semitone, is similar to the chromatic character of spoken melody. Perhaps we ought to consider the expression of the cadence as identical in these two uses of the voice ; since the return to the key-note, which is constantly occurring in song, does, like the intonation at the periods of discourse, produce the agreeable feeling of repose and satisfaction.

Let us take another view of this subject ; and speak of the different kinds of melody.

The Discrete-song is not without expression, though it falls short of the kind which arises from a judicious use of the higher elements. Its sources lie in quality, tune, time, and stress.

There is something in the mere sound of a prolonged note, which may give a peculiar character to song. Fulness produces solemnity; smoothness excites the idea of beauty; and in the higher efforts of the comic song, the distorted variations of quality give rise to a sense of the gay or ridiculous. As regards quality, the principles of expression are similar in speech and song: but perhaps the kind of voice is more palpable in the latter.

The expression of Tune consists in the transition through certain intervals. The discrete-melody can therefore display the plaintiveness of the semitone and the minor third, and the more energetic effect of the other intervals of the scale.

The plain song may, by its Time, be either grave or gay. It appears that song is more agreeable than the short syllabic impulses of speech, though they may each have the same order of pitch. I am disposed to think this arises from an association of the notes of song with the effect of long quantity in speech: for this is always the sign of some strong or dignified emotion.

The radical and the median stress are applicable to the protracted note of the discrete-melody: but it is the varied mode of the swell in the latter which constitutes the principal means of expression.

Some of the more moderate forms of the wave may be admitted into what I have called, without assigning a very definite boundary of its nature, the discrete-song.

From some very general descriptions and some known particulars of the Greek song, it might be inferred that its melody was of this discrete class; enriched with all the forms of expression which are admissible into its structure.\*

\* I once contemplated subjoining to this essay, a discussion of the subject of Greek Accent. But I hope I have now sufficiently displayed the emptiness of its pretensions, by the full light of modern analysis. The noise of national reputation, like that of individual vanity, may serve the purposes of those who make it. One can however see about him every day, enough of the boast of empires and of men, to make him scrutinize the rolls of fame which were blazoned by the same genus of credulity, two thousand years ago.

I know all the stories about barbarian ambassadors being delighted with the

The character of the Concrete-song appears in various degrees, from the limits of the style last described, to that intricate composition of the vocal elements which defeats their purposes, by an annihilation of all meaning and sentiment.

The expression of this melody includes all those effects, enumerated in the account of the Discrete: with the addition of more extended and delicate means. The further employment of the radical and median force on the arsis and thesis, as well as on the wave, adds a brilliant variety to the effect. We have in the Bravuras and Volatas of this kind of song, all the extraordinary coloring of the compound stress, in the production of the shake, and the almost infinite forms that Divisions assume in their play with time and pitch. It likewise commands those powers of expression which are derived from the Tremulous scale, both through the plaintiveness of the semitone, and the laughing movement of wider intervals.

As song employs the elements of speech in its composition, one would suppose that certain movements must have in each case an identical expression. But it is not always so. I have

mere music of a language which they did not understand: and of that universal acuteness and 'proud judgment of the ear,' which made the Athenian herb-women and porters speak with all the purity of the Academy. But I must have other proof than the report of Greek historians; and I must find them writing with more fulness and precision, on a subject they are said to have understood so well, before I can believe that in this matter they were at all superior to ourselves.

If I were even disposed to believe in the vocal perfection of the Greeks, through any other testimony than their own, I should be compelled to question the authority of their Roman eulogists: since they themselves, the pupils of the Greeks, display no better analysis or system in their institute of elocution. We may fairly estimate their discrimination, when we know, that with the same pen which deals out the extravagancies of praise upon the oratorical action of their masters, they gravely give us, as a proof too of their own nicety in vocal matters, the story of one of their famous orators having occasion for a Pitch-pipe; to enable him to recognize his own voice, and to govern his melody, through the more acute perceptions of a slave, who now and then blew the little horn at his elbow.

Should I be obliged to hold an opinion upon the subject of ancient accent,—the fixed appropriation of its acute, grave, and circumflex signs to syllables, being utterly inconsistent with a proper or elegant system of intonation, would induce me to believe, that the Greeks and Romans did always mean stress, by their idea of the accentual function; but that they had connected with it a crude theory of pitch, formed perhaps out of some fragments of Egyptian science, which they themselves did not thoroughly understand.



enumerated some functions that represent the same sentiments in both. There are, however, many forms of intonation which lose their meaning and force when transferred to song. In treating of the vocal signs of the passions, we learned that their design is not only modified by the descriptive agency of words, but in some instances is purely dependent upon it. I endeavoured to illustrate this by reference to the voices of birds : but song affords a more satisfactory proof. For since its more elaborate structure does employ all the forms of concrete and radical pitch, together with the wave, which make the expression of speech, we ought, during the varied course of its melody, to be constantly recognizing the vocal signs of interrogation, surprise, positiveness, sneer, contempt, and raillery : whereas the song which makes the freest use of these symbols never conveys the above named sentiments, except it is joined to language.

Song is, nevertheless, powerfully expressive ; and it is so by the use of these very concretes, and quantities, and waves, and abrupt and swelling stresses, which give the sentimental meaning to speech. Any person who is in the habit of enjoying the display of song, will say that the emotions created by it are so far indefinite, that he is not able to refer them to any other source than that of general association, nor to reduce the signs of expression to such classes as have long been perceived in speech, though they have never been formally named.

Upon this subject, I would ask two questions.—Has song a system of expression properly its own, and does our indefinite perception of its points, arise from this system never having been analyzed and rendered familiar and specific by names? Or—does the expression of song depend on an association between the elements used by it, and those of speech ; the former assuming the agreeable effect of the latter, without their definite meaning?

We are now prepared to sum up the differences between song and speech.

The Discrete-melody, though the least removed from speech, is still remarkably distinguished from it by the effect of the protracted note, and by the more frequent occurrence of wider transitions in the radical change.

In the most complicated form of Concrete-song, for I thus



choose the extreme cases, the difference consists in the sort, number, and uses of its movements. The range of its melodial compass exceeds that of speech. The compound stress, in the form of the shake, and in the rapid run of divisions, is the most frequent constituent of airs of agility; but is never used in quick time by the speaking voice. The only function common to both is the equable concrete, which is sometimes set to the short syllables of song; though it is not then recognized as a feature of speech. The wider waves, too, are occasionally used for emphasis in discourse: but the combination of the arsis and thesis, into this movement, occurs perpetually in the florid song.

We are now able to comprehend, why persons who sing with the greatest execution are rarely or never good readers. One cause may be assigned in the difference of the respective movements; particularly the want of the full command over the equable concrete in all its modes of time, by singers, since they rarely employ it except for the short quantities of the comic song. But the principal reason why those who are distinguished for vocal flexibility, in elaborate composition, are generally very indifferent actors, is, because this intricate execution is always made with a sacrifice of expression. I have shown that on some points, the expression of song and speech is identical; and that even when the former does not convey the special sentiments of speech, by the uses of its intonations, still it has a meaning of its own, however indefinite it may be. But the practice of the bravura song, with some rare exceptions, exhibits a total disregard of the instinctive intonation of passion. In it, long and short quantities,—the radical explosion and the median swell,—the diatonic succession and the chromatic,—the plaintive and the laughing tremor,—the various forms of the wave,—concrete transitions and discrete skips, from the deepest bass to the piercing falsette, are made to play with each other in every mode of permutation. In short, as the voice, like the throat of the mocking-bird, mingles all its possibilities, without regard to design, the singer thereby confuses that natural association between sentiment and symbol, which good speaking always requires, and which should also be the characteristic of song. If I had the opportunities of European experience, I might speak with

more universality and precision, but, as far as I have observed, singers who excel in the florid execution, are not often gifted with nicety or comprehensiveness of conception, nor with that sensibility which is apt to accompany or to constitute a delicate organization of ear. For the temperament of a singer can as readily be perceived, in his peculiar management of time, stress, and intonation, as the mind and feeling of a writer can be gathered from his style.

A musical ear is only the exercise of attentive observation by this sense: and though I am convinced that the most finished powers of elocution must always be grounded on the discrimination which it implies; I am no less under a belief, that training the ear to that degree and kind of perception, which accompanies the present exalted powers of vocal execution, must destroy its natural association with the proper expression of speech. There have been renowned actors, such, I mean, as have reached the philosophy, and the philosophized passion of the higher drama,—who have been skilled in the discrete-song, and to a degree in the concrete: and whilst I believe that, with the proper discipline of the school, they could have attained all the flexibility of the florid execution, I have very little doubt that if such a power had been much exerted, it would have destroyed all that command over the equable concrete, which made them the full organ of the tragic poet. Mrs. Siddons might perhaps have joined voice with the incomparable Mara, in the expressive songs of Handel or Mozart, without impairing her power over Shakspeare. But she would have been lost forever to all the mind and soul of speech, had she been trained with Catalani, to that wonderful facility which was able to outstrip even the fashion-serving contrivances of the composers of the day.

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### OF RECITATIVE.

The term Recitative is applied to a mode of intonation which is used in certain dramatic and vocal compositions. It had its name from being appropriated to narrative or recital, in contradistinction to the mode of intonation in song which was considered as adapted to the language of sentiment or

passion. Recitative is however employed at present in the Italian Opera, as the means of expression, as well as for the common purposes of the dialogue.

Nothing has puzzled musical logicians more than the attempt to define this term.

Rousseau, in his dictionary, speaks of it thus:—‘Recitative. A discourse recited in a musical and harmonious tone. It is a method of singing which approaches nearly to speech, a declamation in music, in which the musician should imitate as much as possible, the inflexions of the declaiming voice.’—

Busby attempts to explain it thus:—‘Recitative. A species of musical recitation, forming the medium between air and rhetorical declamation, and in which the composer and performer rejecting the rigorous rules of *time*, endeavours to imitate the inflexions, accent, and emphasis, of natural speech.’

One calls ‘Recitative—a kind of singing that differs but little from ordinary pronunciation.’

Another says,—‘Recitative is speech delivered through the medium of musical intonation.’—

Whilst others, still more general, describe it as——‘singing speech,’ and——‘speaking song.’

Before we know what we require in knowledge, we never perceive how little satisfies us: and perhaps it is here first shown,—that all these words, though written to instruct, contain no further explanation, than might be given by the humblest auditor at an oratorio. By the terms of all these definitions, Recitative is somehow made up of speech and song. Now the elementary movements of song had, in a degree, been known and described; and therefore the meaning of its term in the definition, might not have been incomprehensible, if vocalists had ever thought of showing its nature and influence in the compound. But, as regards the knowledge of speech, on which these definitions are constructed, let us hear Rousseau, under the very article we have quoted above. ‘The inflections of the speaking voice’ says he, ‘*are not bounded by musical intervals*. They are uncontrolled, and *impossible to be determined*.’

An understanding therefore of the nature of Recitative,



through the nature of its mingled or interwoven constituents, song and speech, the latter of which was thus declared to be utterly inappreciable, must have required some other powers of comprehension than we at present possess. For having no perception of the characteristics of one of the constituents, the idea of Recitative must have been, if I may be allowed to jest, not unlike that of our personal acquaintance with the heads of a family, the father of which is married to an invisible woman.

In general definition,——Speech, Song and Recitative, are varied modes of intonation, deriving their specific differences from the kind and combination of their vocal elements. Having described the melodial peculiarities of speech and song, I shall, by the same light of analysis, endeavour to point out the characteristic intonation of Recitative.

The plainest form of what is called Recitative, for its form varies, is at once distinguishable from speech and song, by the following mode of its construction.

*First.* It has no symmetrical rythmus or musical measure in the progression of its melody.

*Secondly.* It employs the protracted radical and vanish, and the wave, on its long quantities, and occasionally the equable concrete on short ones.

*Thirdly.* Its melodial intervals, or the discrete movements of its radical pitch, are of all dimensions, both in upward and downward transition.

*Fourthly.* It employs the means of time, force and quality of voice.

These are the simple elements, constituting Plain Recitative: and the following are some of the principles of their application.

The melodial progress consists of a succession of phrases of the monotone, and of every interval, even to the rising and falling octave: and these are so disposed, as to effect a continued variety. Thus its melody exhibits no systematic distinction between a diatonic ground-work, and the emphasis of higher intervals, such as gives effective power and dignity to speech: the successions of pitch being rather according to the promiscuous mingling of song. I have not been able to recog-



nize, in what is called unaccompanied recitative, any application of the doctrine of key ; its melodical relationships having in this respect the characteristic of speech. The full pauses are made by phrases of every form, from the monotone, to the rising and falling discrete octave : the current melody, and the pausal phrases consisting, for the most part, of the protracted radical or vanish, with an occasional rising and falling concrete and wave.

Such being the structure of Recitative, it is conclusive, that the power of expression must fall far below that of speech. Making the inflexions of the speaking voice, which it pretends to borrow, the measure of this power, the only forms of expression I have been able to perceive, in the plain mode of Recitative above described, are included under the following heads :—

*First.* The expression of slow or rapid utterance, and of long and short quantity.

*Secondly.* That of the degrees of force, both as to emphasis and drift.—

*Thirdly.* That of quality, particularly of guttural emphasis and aspiration.

*Fourthly.* That of intonation, by the employment of the discrete rising fifth or octave for inquiry ; of the downward skip for positive or imperative declaration ; and of the wave of the semitone and minor third for plaintiveness. But even these do not seem to be so applied, according to invariable rule ; for I have heard true interrogative phrases and declarative questions, intonated with a simple monotone, or ditone, or downward fifth or octave ; and forcible imperatives, with the widest ascending intervals.

The form of Recitative, of which I have been treating, would be heard by the common ear, as something distinct from both speech and song : and the above enumeration of its elements, must convince us, that not having the whole of the constituents of either, it must be different from both. But as we now have an analytic perception of the respective structures of them all, we can see what is common to the three, and what peculiar to each. We perceive too, that one can not assume the character of another, without dropping itself, and becoming

that other : and that those definitions which set forth Recitative, as a musical intonation of speech, or an engrafting of the inflexions of speech on song, are no more than absurdities. We can further see, that as it is made up of the elements of song and speech, the characters of one or the other may predominate according to the prevalent use of their respective elements. And so it happens with dramatic composition, that the singer often changes the mode of the above described plain Recitative, to that of florid execution, by freely introducing the constituents of song. Hence instead of the plain melody, constructed of the few elements above mentioned, he introduces, in a greater or less degree, the arsis and thesis in all their forms, divisions of every variety, tremors, shakes, notes and waves : in short, whilst employing these elements, under a barred and rhythmic time—he does, in effect, produce the full characteristic of song itself.

In regarding then these three modes of intonation, it appears—that Speech and Song, both by construction and effect, are most unlike each other :—that Recitative, even of the plainest sort, by construction more nearly resembles song, and in the execution of vocalists, most readily runs into it :—that speech has the most extended and delicate powers of expression ; because there is in it, a union of sentimental language with its instinctive intonation, and a perfect adaptation of one to the other :—that song exclusively of words, and with its music alone, has the means of exciting feelings of grandeur, pathos, gaiety and grace, by the force, quality, quantity, and intonation of the voice :—and that Recitative, which, by one of the not unfrequent delusions of perception, was originally introduced, and has since been continued for centuries, as carrying the double agency of vocal and oratorical expression, does, by this vain design to effect a combination of incompatible functions, really destroy the peculiar and delightful essence of each.

We owe the modern creation or revival of Recitative, in part, to the mystic influence of that vampire of classic authority, which whilst fanning us into a self-glorifying stupefaction, has for ages been drawing out the life blood of our intellectual independence. The ignorance of the Greeks, upon the ana-

lysis of the vocal functions, obliged them to describe their limited perceptions, by loose explanation and indefinite metaphor; whilst the moderns have been contented, in this as in other of their arts, to take a record of the poverty of their analytic knowledge, as the historic scraps of their perfection. The learned world has teased itself into despair, by attempts to discover, wherein consisted the inimitable charm of Greek poetical recitation; and to reduce to palpable illustration the extraordinary formal causes of that 'melodious language,' which when writers on the human voice shall fully understand their subject, they will admit to be very little more melodious than their own. 'Among the Greeks,' says Rousseau, and he may well speak for the rest in this matter,—'among the Greeks, all their poetry was in recitative.' And again: 'The Greeks could sing in speaking, but among us, we must either sing or speak; we can not do both at the same time.' With such a mystical and distracting physiology as is here set forth, no wonder that worshippers of the inexplicable power and perfection of antiquity, should have raised up altars to this 'Unknown God.'—Nor that Pulci the poet, in reciting his *Morgante Maggiore*, as we are told, at the table of Lorenzo de' Medici, should have imagined himself to be the happy instrument of a needed revelation, of the method of Grecian dramatic-recitative, or of Homer's declamatory song.



HERE I conclude the cursory view of the physiological functions of song and recitative: having avoided therein, every thing like a practical consideration of the subject. Some one better qualified than myself may be disposed to prosecute the inquiry. In the first part of this work, I have set forth the nature of expression in Speech, by an elementary description, and detailed illustration of its particular forms. An investigation of the nature of expression in Song and Recitative, by the light of that analysis, and according to the hints here thrown out, would be interesting, and might be successful. Nothing could give me more pleasure than to assist in its development. But this would lead me from some other designs

of duty ; and I have too impatient a perception of the wasted experience, and profitless logic, which daily present themselves in the changeful errors of my profession,—not to desire to use in its service, a method of philosophy which I hope will be found to have been effectual here.

For reasons that are known to more than to myself, but which the public need not at present know, I laid aside a Practical work on Medicine, with the view of completing this :—and I am now going to resume it.

THE END.















